Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State

Papers Presented at a Workshop Held at the 11th ICAANE (München 4 April 2018) and Additional Contributions

Edited by
Federico Manuelli and Dirk Paul Mielke

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Foreword

The idea to bring the 'Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State' in the focus of supra-regional research was born at the beginning of 2017. At that time, both editors worked at the Freie Universität Berlin, where our researches were shaped in a bustling atmosphere with lots of exciting projects. Moreover, a decisive factor was that both of us were engaged in the study of painted ceramics from the Anatolian Late Bronze Age world in the context of our own projects. In addition, there were other scholars dealing independently with similar findings from their excavations...it seems that sometimes certain issues are in the air. Accordingly, we developed the idea to organise a workshop about the different painted pottery traditions that were apparently clustered around the 'unpainted' core region of the Hittite State in the framework of the 11th International Congress on the Archaeology of the Ancient Near East (ICAANE). Many colleagues accepted the invitation to the workshop with great enthusiasm and we all met together at the Ludwig-Maximilians Universität München on the 4th of April 2018. The workshop was very intensive and the fruitful exchange produced a great gain in knowledge for all participants. But the volume on hand is not only the result of this workshop. For the publication, the research topic was supplemented with further contributions that expanded the knowledge of the phenomenon in question. Therefore, we wish to express, first of all, our gratitude to all the contributors of the volume, both those that participated in the original workshop and those who decided later to join this project. A special word of gratitude is needed to Hermann Genz and Geoffrey Summers, who have accepted the double effort of carefully reviewing all the papers and writing the final remarks of the volume: their patience and enthusiasm have been fundamental for its successful publication. We extend our thanks to the Archaeopress team for having supported this project and have provided us with all the necessary technical support. Moreover, we are thankful to the organizers of the 11th ICAANE, and in particular to Michael Herles, for their help and hospitality in Munich. Lastly, it should be stressed that the publication of this volume was possible due to the research project awarded by the Deutsche Forschungsgemeinschaft (DFG project #324049112). With the awareness that the painted pottery traditions at the margins of the Hittite State represents an outstanding and to date unexplored phenomenon, we trust that the book will find its own place in the scientific community and the subject gets its due attention within the research topics of Late Bronze Age Anatolia.

Federico Manuelli and Dirk Paul Mielke

Berlin/Rome and Münster, August 2022

Introduction – Throwing Some Colour on a Plain World

Federico Manuelli and Dirk Paul Mielke

The different but closely related 'Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State' that are in the focus of the present volume represent a specific phenomenon of cultural history. To achieve deeper insights into this previously neglected topic, it is necessary to look at the cultural-historical conditions in which these pottery traditions developed, as the latter can then be explained as a spatially and temporally limited structure of production. The framework in which this phenomenon appeared is given by the Hittite pottery, the dominating ceramic tradition of Late Bronze Age Anatolia, which profoundly influenced the neighbouring regions especially during the imperial period. Leaving aside the discussions on the different labels applied to this ceramic tradition, it is here important to stress that we are dealing with the pottery connected with the genesis and development of the Hittite State and its society.[1]

In the course of its near 500 years of history, the Hittite State developed from an 'Anatolian kingdom' to an Ancient Near Eastern empire.[2] Especially in the 14th and 13th century BC, the empire of the Hittites was one of the dominant great powers of the Ancient Near East. In contrast to the sphere of influence casts by other polities, the material culture of the Hittites was mainly restricted to its core region, i.e. the northern parts of the Central Anatolia plateau, roughly marked by the course of the Kızılırmak. But with the exception of some visualisations on general maps, the borders of this core have never been systematically defined and the distribution of Hittite pottery within these maps is anything but obvious.[3] Recently scholars have pursued a better definition of this region and especially of the interactions between core and peripheries by analysing Hittite material culture and, above all, pottery distribution,[4] although a comprehensive reconstruction and interpretation supported by all sets of available data is still missing.

In the early years of research it was thought that Hittite pottery was mostly characterised by the fine Red Slip Ware (**Figure 1.1**), but this type of production was restricted to few selected forms such as the famous beak spouted jugs and represents an older phenomenon of the Hittite pottery sequence. However, after the first publications of the pottery assemblages from different sites such as Boğazköy-Ḫattuša and Alaca Höyük it became evident that the so-called Plain Ware – often disparagingly denominated as 'Drab' Ware – was the dominant production of Hittite pottery (**Figure 1.2–14**). This led to another extreme interpretation that is commonly shared by scholars. Indeed, nowadays Hittite pottery is mostly seen as a Plain Ware wheel-made mass production, a definition that obviously does not match the more complex reality.[5] The existence of a wide set of painted pottery traditions found around the Hittite core is further evidence of the multifaceted and intricate situation that characterized the development of this Central Anatolian power and especially its relationships with the surrounding regions. But how can the appearance of these painted traditions be explained and how do they concretely interweave with the history and development of Hittite pottery and material culture?

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[1] For the general characteristics of Hittite pottery see Mielke 2017; 2022.

[2] For the history of the Hittites see the comprehensive studies of Klengel 1999 and Bryce 2005.

[3] E.g. Schachner 2011 (back cover); Bittel 1976, Fig. 344 with a more extended area.

[4] E.g. Glatz 2009; Manuelli 2013, 399–423; Matessi 2017; Glatz 2021, 76–99.

[5] For the research history of Hittite pottery see Müller-Karpe 1988, 1–3; Mielke 2006, 13–23. For the dominance of Plain Ware in the Late Bronze Age see the contributions presented in the volume edited by C. Glatz (2015).

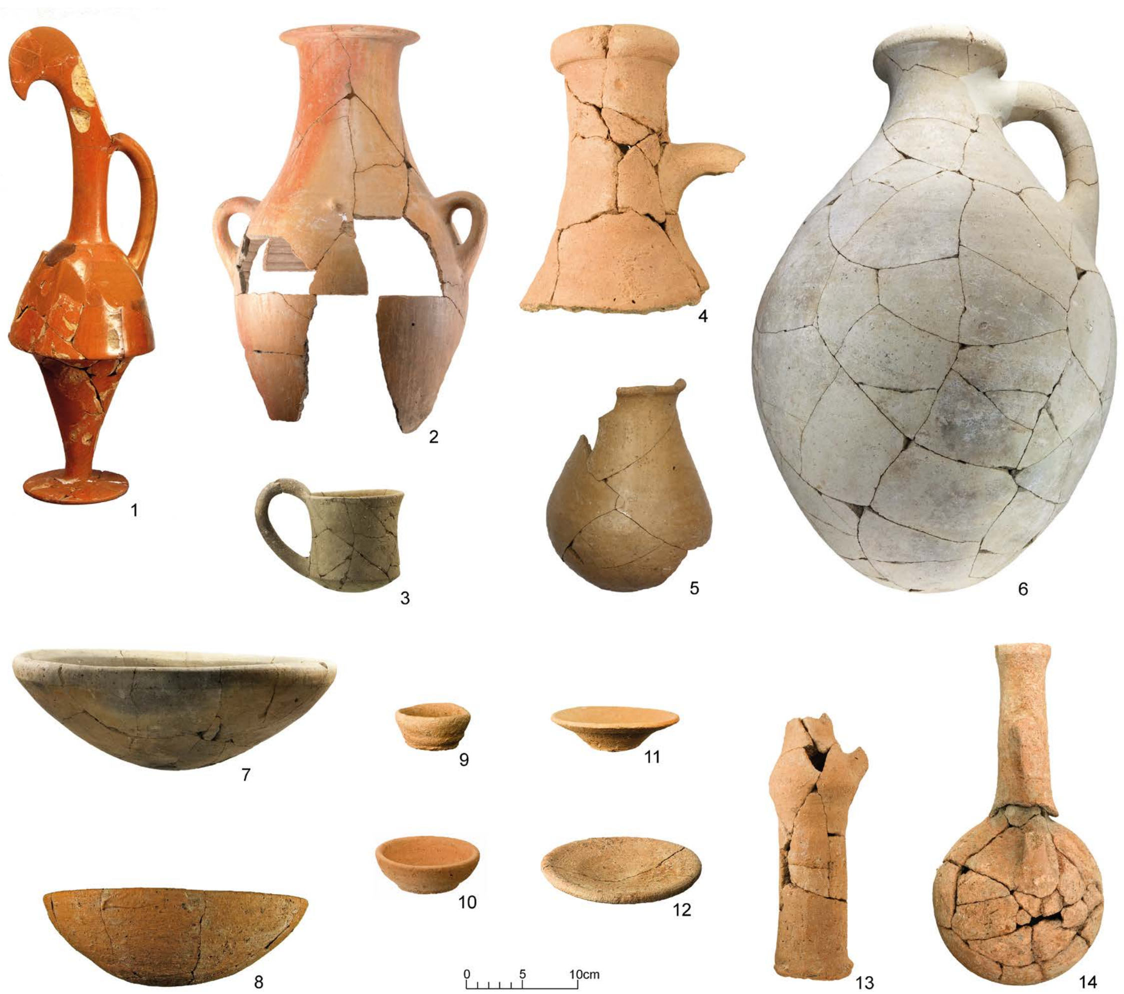

Figure 1: *Late Bronze Age Hittite Red Slip and Plain Ware pottery, 16th to 13th century BC. 1) Red Slip beak spouted jug from İnandıktepe (after Özgüç 1988, Pl. E.2); 2–14) Plain Ware from Oymaağaç Höyük/*Nerik *(photos: Oymaağaç project/ Henning Marquardt).*

The studies presented in this book aim at providing some answers to these and further questions. The volume represents an assemblage of contributions written by scholars working at those Anatolian sites where remarkable amounts of painted pottery repertoires have been brought to light in association with the Late Bronze Age levels. Nevertheless, we make no claim at completeness and some relevant sites, e.g. Kilise Tepe, are not appropriately represented. It should be stressed that painted pottery has hardly been taken into account in previous studies conducted on this period. Indeed, painted assemblages have been usually considered exclusively in the framework of the Mycenaean or Aegean imports, and only in recent years have a substantial number of local painted repertoires been acknowledged and studied from some Anatolian Late Bronze Age sites.[6] Nevertheless, there has been no super-regional analysis and accurate comparison of these materials to date and many essential research questions have been left unanswered or are still neglected. For instance, are we dealing with different and independent local painted traditions or is there to any extent a common root? Can we connect the appearance of this trend to specific exchanges of ideas or movement of material and people?

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[6] E.g. Yağci 2010; Manuelli 2013, 203–212; Dedeoğlu and Konakçı 2015; Ünlü 2015; Mielke 2016b, 42–52; Jean 2019–2020.

The main reason for this lack of interest probably relates to the fact that all these Late Bronze Age painted pottery assemblages are characterized by similarly simple and unsophisticated geometric red-brown coloured motives. This has made it seem that studying them would be rather monotonous and, on the other hand, it makes the definition of their chronological, historical and cultural framework rather puzzling. But as said, painted pottery is just one piece of a more complex cultural puzzle and to understand it we cannot ignore the context and events that characterized the development of the Hittites and other Anatolian societies as well as their ceramic cultures.

Therefore, the first question that we have to try to answer follows a more 'centripetal' perspective, i.e. why we do not have a painted pottery tradition during the Late Bronze Age in the core of the Hittite world? One fundamental problem in the assessment of Hittite pottery is the scarce consideration given to the fact that this pottery is the result of an ongoing process that took place over nearly 500 years of history. Despite the hotly debated question of a Hittite or Indo-European immigration to Asia Minor,[7] the development of Hittite material culture is an autochthonous phenomenon best characterised by the heading 'from Anatolian to Hittite'.[8] Therefore, it is necessary to go little further and look at the foundations of the Hittite pottery. In doing so, we of course need to pay special attention to the painted ceramics attested in the earlier periods in North-Central Anatolia.

It must be stated that the main characteristics of pottery technology used by Hittite potters had been applied for several centuries before the Hittites entered the area.[9] Indeed, the first pottery in Anatolia was produced around 7000 BC.[10] In the 6th millennium BC, the first painted decorations appeared, especially in the Lake district. In Central Anatolia, the northern part of which was first settled during the Chalcolithic period, smaller amounts of painted pottery are also attested from the few excavated sites such as Alişar Höyük, Alaca Höyük or Büyük Güllücek (**Figure 2.1–4**).[11] This Chalcolithic pottery is mainly decorated with geometric motifs applied by different methods of painting in combination with incisions. However, it cannot be ignored that nowadays there are still several unexplained aspects of the appearance of painted pottery tradition in North-Central Anatolia.

An increasing specialization in the field of pottery production can be seen from the end of the 4th millennium BC or the beginning of the Bronze Age when complex societies formed.[12] This is testified by the first appearance of up-draft pottery kilns with separate firing and pottery chambers in the Early Bronze Age (ca. 3100–2100 BC).[13] Interestingly, the later pottery kilns of the Hittite period, examples of which are known from Boğazköy-Ḫattuša, Kuşaklı-Šarišša and Eskiyapar, show the same technological characteristics.[14] However, the most important technological aspect for our topic here is the introduction of the potter's wheel, which appeared in Anatolia during the last quarter of the 3rd millennium BC, in the Early Bronze Age III period (ca. 2400–2100 BC). Yet it must be noted that this was only one of the last steps of a long and multifaceted process that took several centuries to be completed and was finalised only during the first half of the 2nd millennium BC, in the Middle Bronze Age.[15] The so-called Kārum period (ca. 2100–1700 BC), can be considered a peak moment in the development of pottery technology in Anatolia. In this period a dense network of supra-regional trading posts was established in proximity

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[7] For this topic see Bryce 2005, 8–20; Collins 2007, 23–25.

[8] Mielke 2017.

[9] Mielke 2017, 121–125.

[10] Thissen 2007.

[11] See the short and now outdated overview provided by Orthmann 1963, 96–100. For the complex developments of the Neolithic and the Chalcolithic period see Düring 2011, 47–256 and Schoop 2005; 2011b.

[12] Düring 2011, 257–299.

[13] Mielke 2017, 125.

[14] For the Hittite pottery kilns see Mielke 2016a, 164–169.

[15] Mielke 2017, 122–123 with further references.

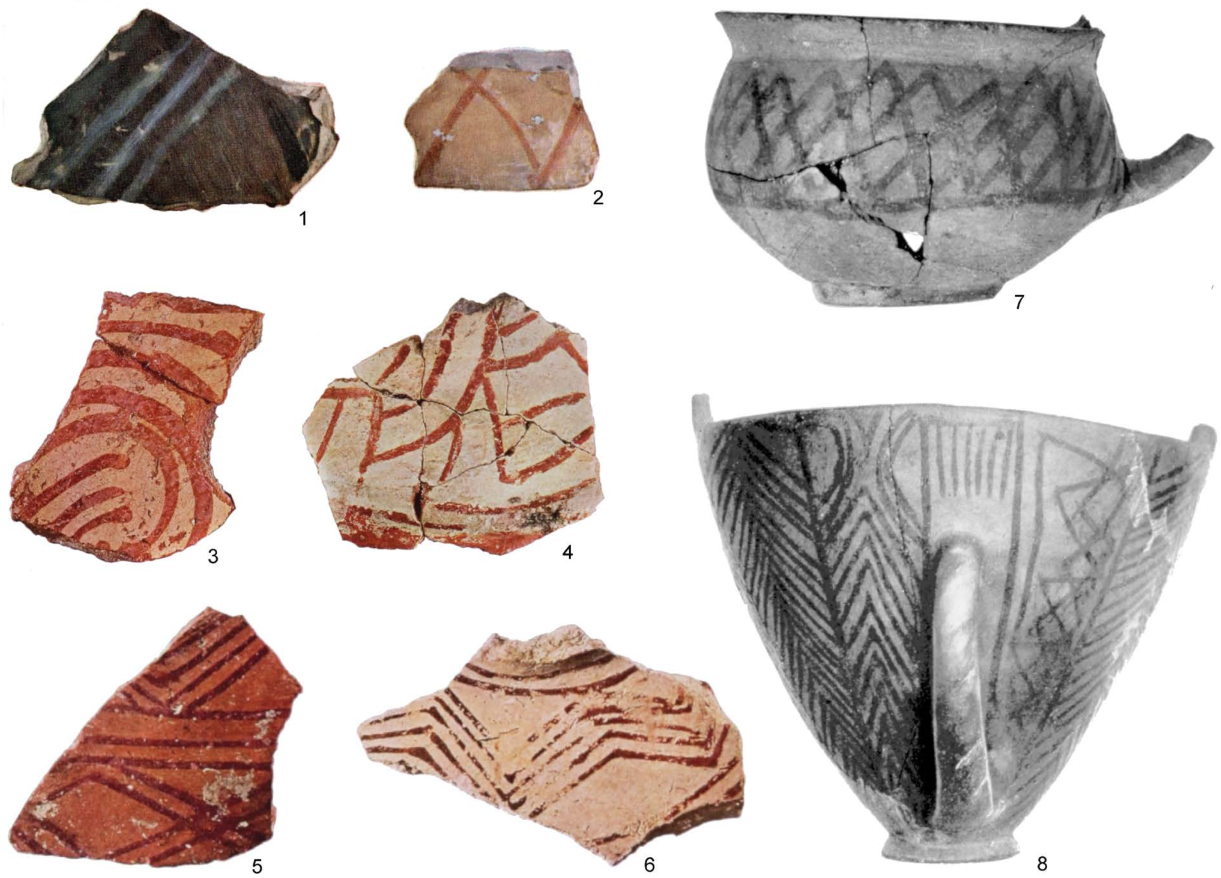

Figure 2: *Chalcolithic pottery and Early Bronze Age Intermediate Ware. 1–2) Chalcolithic pottery from Büyük Güllücek (after Koşay and Akok 1957, Pl. XI); 3–4) Chalcolithic pottery from Alişar Höyük (after von der Osten 1937a, Pl. 2.2–3); 5–8) Intermediate Ware from Alişar Höyük (after von der Osten 1937a, Pl. 4.8–9, Fig. 233.c2264, Fig. 235.6). Not to scale.*

to the most important Anatolian cities and an amazing and highly developed pottery production is observable. The high quality of this production is demonstrated by the use of different wares and their technological characteristics as well as the numerous associated vessel forms.[16] It is important to note that the pottery production of the Kārum period shows genuine Anatolian characteristics and is not influenced by Northern Mesopotamia, what could be expected. Moreover, it was of great importance for the cultural genesis of the Hittite ceramic tradition. Therefore, the most significant foundations of Hittite pottery had been set from the end of the Early Bronze Age to the following Middle Bronze Age. These considerations are also crucial for our topic, since after the first appearance in the Chalcolithic, geometric painted pottery seems to significantly gain importance during the Early and Middle Bronze Age in the sub-regions of Central Anatolia surrounded by the Kızılırmak river. However, the state of the research on these painted ceramics is still puzzling. Indeed, the painted pottery of the Early and Middle Bronze Age was first brought to light at the end of the 19th and the beginning of the 20th century AD, mainly through unprofessional diggings, so its correct chronological classification was unclear due to the lack of stratigraphic excavations.[17] Since this pottery was often found together with the so-called ‘Cappadocian tablets’, i.e. the cuneiform clay tablets of the Assyrian Colony/Kārum

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[16] Emre 1963; Özgüç 2003, 142–232.

[17] Chantre 1898, 81–91, Pl. VIII–XIV. The material from the excavations of Chantre in Kültepe and of Grothe (1911) in Cappadocia was later published by H. de Genouillac (1926) and L. Curtius (1911) respectively. The best knowledge of this material at that time was actually presented by Myres 1903, 377–390; Frankfort 1927, 156–161; Meyer 1914, 52 and later by Bossert 1942, 41–43. For the early research history of this pottery see Bittel 1934, 13–14, 70–71, 109–111.

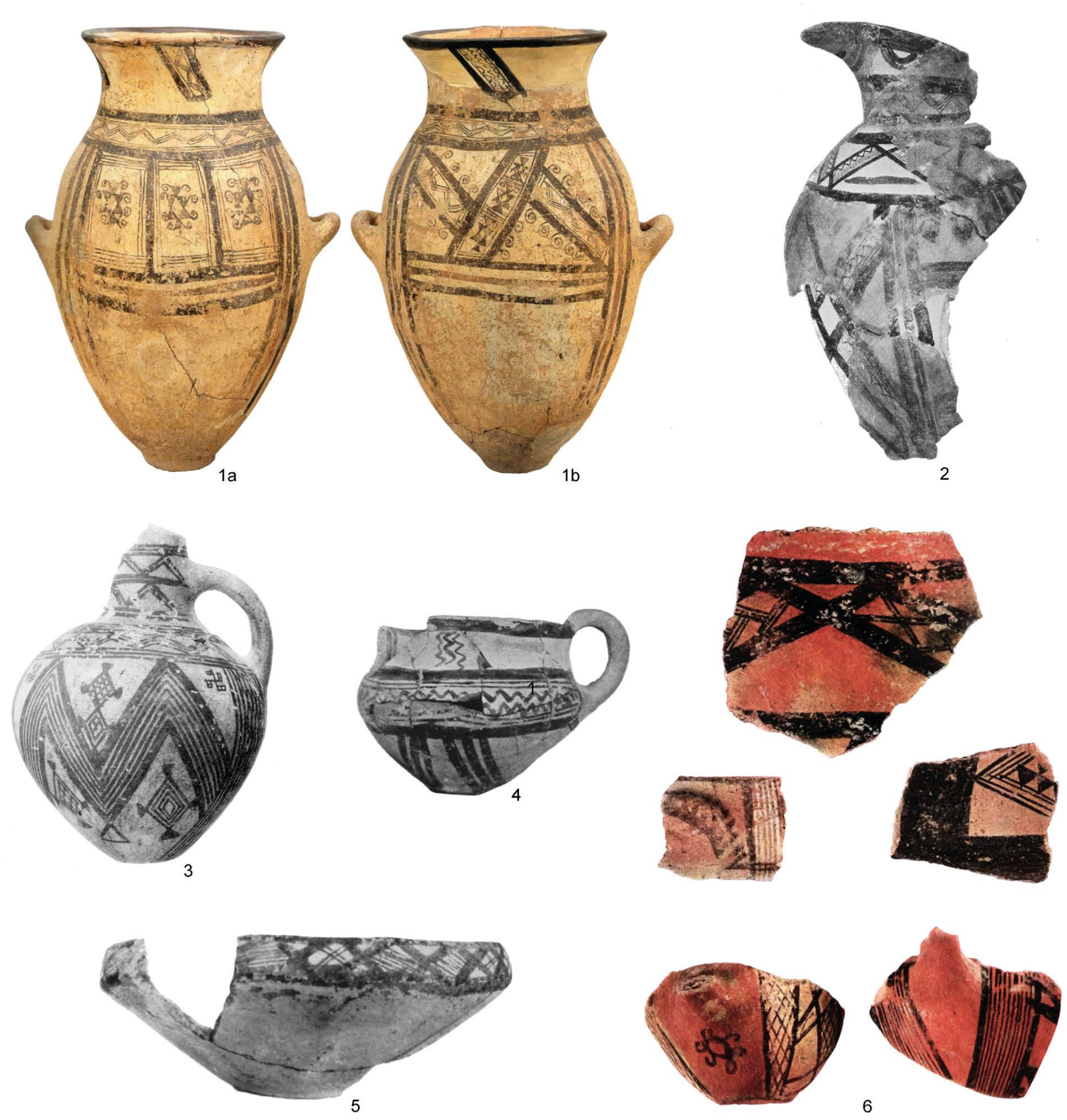

Figure 3: *Early and Middle Bronze Age Cappadocian/Alişar III Ware from 1) Kültepe (after Özgüç 2003, Fig. 151–152); 2) Alişar Höyük (after von der Osten 1937a, Fig. 241.c226); 3) Kültepe (after Bittel 1934, Pl. VII.3); 4) Alişar Höyük (after von der Osten 1937a, Fig. 239.d2493); 5) Alişar Höyük (after von der Osten 1937a, Fig. 237.c801); 6) Alişar Höyük (after von der Osten 1937a, Pl. V). Not to scale.*

period, it was similarly labelled as 'Cappadocian (painted) pottery' (**Figure 3**). The first overview of this production was given by Henri de Genouillac in 1926.[18] At that time, the painted pottery was associated with the 'Hittites' by many researchers, but this was due to the above-mentioned lack of stratigraphic excavations which led early scholars to assign the material culture of the Hittites only speculatively. Moreover, it was almost impossible during this time to distinguish the Bronze Age painted pottery from that of the later Iron Age,[19] which was well-known since the early excavations in Gordion by Gustav and Alfred Körte.[20]

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[18] De Genouillac 1926.

A first important step in assessing the Early Bronze Age painted pottery was the start of the excavations at Alişar Höyük in the province of Yozgat by a team of the Oriental Institute of Chicago under the direction of Hans Henning von der Osten and Erich Schmidt, between 1927 and 1932. The excavations provided the first stratigraphic information on this pottery; however they also contributed to creating new confusion, because the interpretation of the stratigraphy and the findings were changed several times by the excavators.[21] Much of the interpretation and above all the often inadequate contextual information, which are the result of a rather rough stratigraphic excavation, are problematic and the stratigraphy of Alişar Höyük is still nowadays controversially debated.[22] Since the painted pottery occurred mainly in period III of the site, the denomination 'Alişar III Ware' was quickly established by the scholarship, sometimes alongside the old 'Cappadocian Ware'. However, the excavations at Alişar Höyük allowed us to understand for the first time that the painted pottery was dated mainly to the Early Bronze Age and that this production was older than the plain and red slipped wheel-made pottery. Therefore, the painted Cappadocian/Alişar III Ware could no longer be associated with the Hittites.[23] Nevertheless, this ware was still associated with questions of ethnicity, mostly related to the potential migration of Indo-Europeans or early Hittites to Anatolia.[24] In this context, the painted pottery of the Early Bronze Age was often seen as an 'alien' phenomenon.[25] But the excavators of Alişar Höyük also detected an older group of the Cappadocian/Alişar III Ware which was called 'Intermediate Ware' (**Figure 2.5–8**), thus labelled because it was seen as a link between the so-called 'Copper Age' and Early Bronze Age layers of the site.[26] Moreover, the excavations at Alişar Höyük, as well as those at Alaca Höyük, Büyük Güllücek and other sites, further demonstrated that the tradition of painted pottery in North-Central Anatolia started in the Middle Chalcolithic period (ca. 5500–4000 BC),[27] as it was summarised by Tahsin Özgüç in 1947.[28]

Both groups of the painted pottery, i.e. the Intermediate Ware (**Figure 2.5–8**) and the Cappadocian/Alişar III Ware (**Figure 3**), were generally handmade, although wheel-made examples are also known.[29] The fabric of the Cappadocian/Alişar III Ware is very coarse because it was tempered with high amounts of organic material. Therefore, the vessels have often thick profiles. In contrast, the Intermediate Ware shows more mineral temper and finer organic inclusions, which produced thinner vessel walls. A limited spectrum of cups, bowls, jugs and jars characterise both painted pottery groups but these shapes also occur undecorated. A rich variety of painted decorations, mostly geometric patterns such as triangles, zigzag bands and rhombus, often with a metope-shaped outline, can be observed on the Cappadocian/Alişar III Ware vessels. The Intermediate Ware has instead generally a simpler geometric pattern consisting mainly of thin lines. However, it should be stressed that the complex designs of the Cappadocian/Alişar III Ware were generally executed in wide stripes that do not really match the vessel body. Some examples of this ware are also decorated with floral ornaments.

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[19] See Curtius 1911, CCLXXVII–CCLXXVIII.

[20] Körte and Körte 1904.

[21] The best overview of the pottery can be found in von der Osten 1937a, 230–258, which was intended as a sort of 'final report' of the excavations at Alişar Höyük (see von der Osten 1937a, vii).

[22] See Bertram and İlgezdi Bertram 2021, 28–50.

[23] Bittel 1934, 13–14.

[24] See the discussion by Özgüç and Özgüç 1953, 193 with further references and Bittel 1950, 50–51; Götze 1957, 43–44.

[25] See the discussion by Bittel 1934, 111 and Öktü 1973, 143–144.

[26] Von der Osten 1937a, 230–258; Nowadays, the 'Copper Age' is considered part of the Early Bronze Age (see Bertram and İlgezdi Bertram 2021, 41–48).

[27] Orthmann 1963, 96–100; Schoop 2005.

[28] Özgüç 1947, 317–323.

[29] For the technical features of these wares see von der Osten 1937a, 230–258; Öktü 1973; Omura 1991a, 146–149.

While the Intermediate Ware is dominated by red-brown colours, the Cappadocian/Alişar III Ware mainly shows black, dark/brown and sometimes also red or combined matt painting, generally set on a red or brown polished slip. In any case, it must be considered that the distinction between these two wares is sometimes not easy to recognize and in some publications they seem to have been assigned to one or the other across the board without any knowledge of the original definitions given by Hans Henning von der Osten.

The second important step in the history of research on the painted pottery of North-Central Anatolia is marked by the excavations in Kültepe-Kaneš conducted by the Turkish Historical Society under the direction of Tahsin Özgüç from 1948 onwards.[30] The excavations provided more details about the absolute dating of the Intermediate and Cappadocian/Alişar III Wares.[31] The Intermediate Ware was found on the mound level 12 and the Cappadocian/Alişar III Ware on the mound levels 11–8 and Kārum level IV to II. Therefore, both pottery groups must be dated to the Early Bronze Age III (ca. 2400–2100 BC). Moreover, a continuation of the Cappadocian/Alişar III Ware into the Middle Bronze Age (ca. 2100–1720 BC) became evident. In the earlier levels the percentage of painted pottery seems to be very high, while in the later ones it is very small.[32]

But the excavations at Kültepe have also confirmed the existence of another category of North-Central Anatolian painted pottery that was already known before, but only from isolated pieces and could not therefore be classified precisely.[33] This pottery (**Figure 4, 7.1**) comes mainly from the Kārum layers III-Ib which encompasses chronologically the entire Middle Bronze Age.[34] It seems to originate from the Cappadocian/Alişar III Ware, but in contrast it is mostly wheel-made and mineral tempered. The vessels were generally coated with a red polished slip, which often covers only their upper parts (**Figure 4.1–3**). Moreover, a whitish-cream coloured coating, which served as painting ground, was applied in bands, metopes or even covering the entire surface of the vessels (**Figure 4.4–7**). As for the Cappadocian/Alişar III Ware, geometric patterns were usually made in black, brown or red colours. Wavy lines are also frequent, which quickly led to the denomination 'Wavy Line Pottery'.[35] Stylized water birds can also be found in combination with the above-mentioned motifs. However, it should be said that the designation Wavy Line Pottery is rather unfortunate because wavy lines do not always occur and they also characterize the Cappadocian/Alişar III Ware (**Figure 3.4**). In addition, this pottery was labelled by the excavators as 'Hittite' like all the wheel-made pottery from the Kārum,[36] but this definition is inappropriate, since the term should be applied only to the pottery of the Late Bronze Age.[37] According to an estimate of the excavators, this pottery represents 4–5% of the whole ceramic production. Together with the earlier painted pottery wares, the Wavy Line Pottery has a limited repertoire of forms that also occur in Plain Ware. Furthermore, this ware also evolved over time, as can be observed especially in the last phase of the Kārum Ib period, when the geometrical motifs and arrangements were more prominent.[38] The Wavy Line Pottery also occurred at other sites, such as Boğazköy,[39] but surprisingly, to date no overarching work on this pottery exists.

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[30] Since 2006 the excavations are directed by Fikri Kulakoğlu from Ankara University.

[31] Özgüç 1950, 195–198; Özgüç and Özgüç 1953, 188–193; Emre 1963, 92–93, 95; Hrouda 1957, 31–33; Öktü 1973, 38–58 (Intermediate Ware); Emre 1989, 117–119; Omura 1991a, 9–54 (Cappadocian/Alişar III Ware); Ezer 2014, 11–16.

[32] Özgüç and Özgüç 1953, 188–189; Emre 1963, 87; 1989, 112, 119.

[33] E.g. Curtius 1911, CCLXXXIII, Taf. XVI, 1–2; Bittel 1936, 14, Abb. 6; Bossert 1942, 41, Nr. 388–403.

[34] Özgüç 1950, 190–195; Özgüç and Özgüç 1953, 182–188; Emre 1963, 90–91, 93–94; Hrouda 1957, 31–33.

[35] This designation probably goes back to Bossert 1942, 41 (cf. Özgüç and Özgüç 1953, 188).

[36] Özgüç and Özgüç 1953, 182; Emre 1963, 87; 1989.

[37] Mielke 2022, 657.

[38] Emre 1963, 92–94.

[39] Fischer 1963, 132–133.

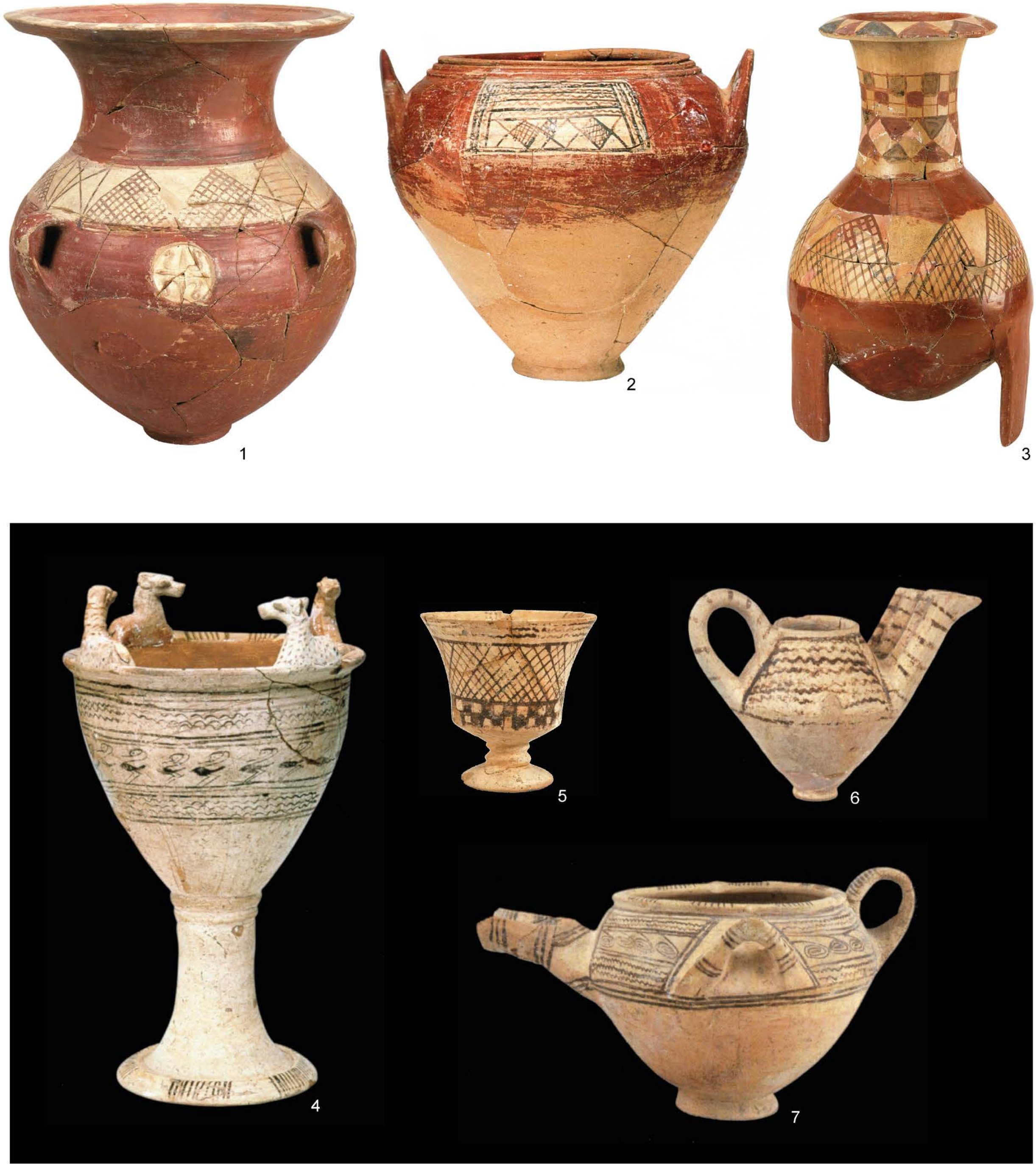

Figure 4: *Middle Bronze Age Wavy Line Pottery from Kültepe. 1–3) Red slipped examples (after Özgüç 2003, Fig. 139 [layer Ib], Fig. 142 [layer II], Fig. 140 [layer Ib]; 4–7) White slipped examples (after Özgüç 2003, Fig. 185 [layer II], Fig. 150 [layer II], Fig. 122 [layer II], Fig. 123 [layer II]). Not to scale.*

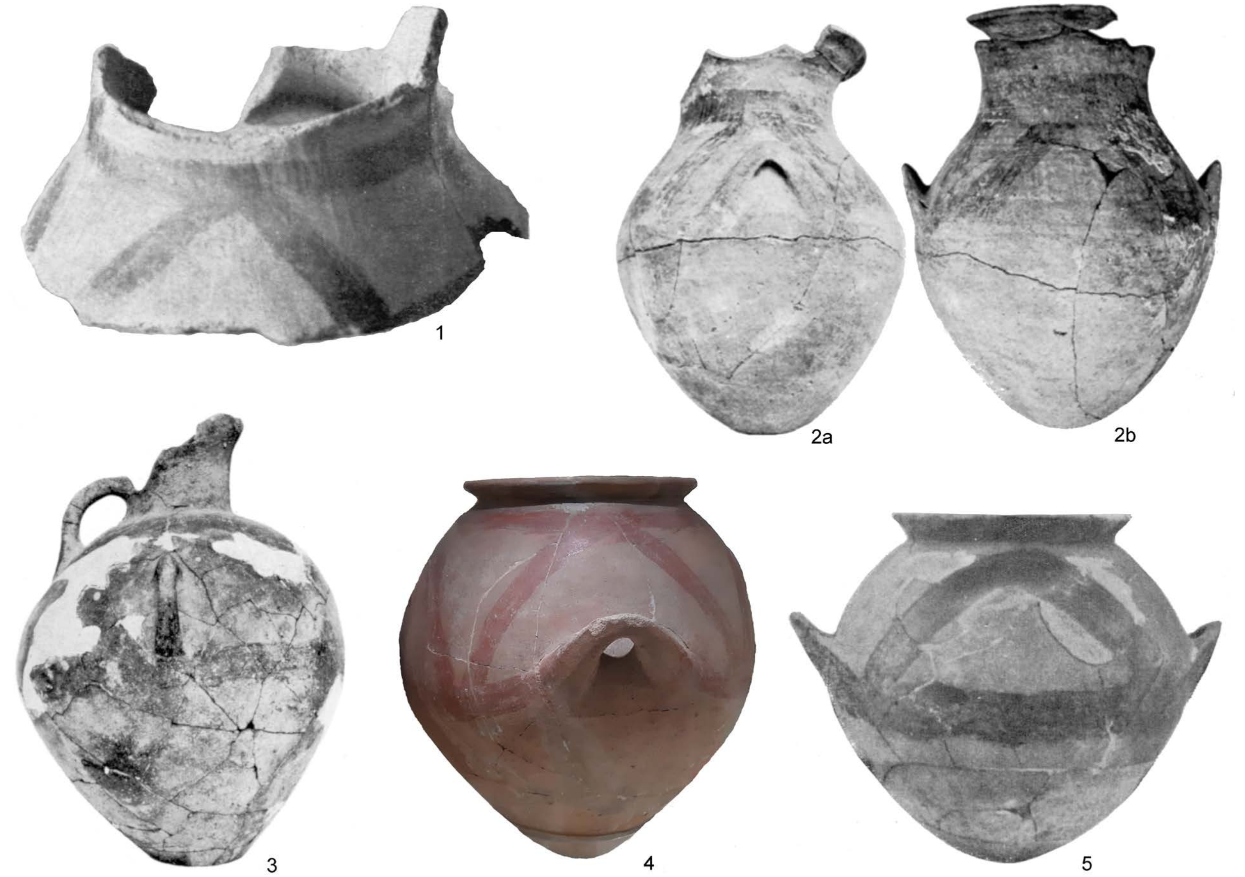

Figure 5: *Middle Bronze Age band decorated pottery from 1) Kültepe (after Özgüç and Özgüç 1953, Fig. 347); 2) Alişar Höyük (von der Osten 1937b, Fig. 197); 3–5) Maşat Höyük (Özgüç 1982 Pl. 93,2, 51.1; colour photo: D.P. Mielke). Not to scale.*

The Kültepe excavations brought to light another interesting painted pottery group characterized by band decorations. A single broken fragment of a big pot, the upper body of which was decorated with thick red/brown bands forming a zigzag motif, has been discovered from layer Ia of the Kārum period (**Figure 5.1**).[40] Complete vessels with similar decorations have also been excavated at Alişar Höyük (**Figure 5.2**),[41] while a huge number of such pots and jars came to light from the Kārum period layer V at Maşat Höyük (**Figure 5.3–5**).[42] Recently, a complete example has also been found in Boğazköy.[43] It should also be noted that from the Kārum level II and IV at Kültepe a few pieces of imported Syro-Cilician Ware have been found (**Figure 6.1–4**),[44] while the so-called Khabur Ware is reported from level Ib (**Figure 6.5–7**).[45]

In the course of the early years of the Turkish Republic, many archaeological studies allowed the new discovery of Early and Middle Bronze Age painted pottery, but the findings from Kültepe and Alişar Höyük were still predominant. The dissertation of Winfried Orthmann from 1963 presented the first overview of excavated and surveyed sites in Central Anatolia where Early Bronze Age painted pottery

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[40] Özgüç and Özgüç 1953, 187, Fig. 347.

[41] Von der Osten 1937b, 138, Fig. 197.

[42] Özgüç 1982, 107–109, Fig. 61, 64, 68–69, 71, 75, 80, Pl. 51.1–2, 92.2, 93.2.

[43] Schachner 2012, Abb. 9.

[44] Özgüç 1950, 198–199, Pl. 60.327, 328, 341; Hrouda 1957, 31, Taf. 13.2; Özgüç 1955, 461, Pl. 29a –b.

[45] Özgüç 1953, 115–116, Abb. 17–18, 25–26; Emre 1963, 95, Pl. 25.1; Hrouda 1957, 31, Taf. 13.3– 4; Özgüç 1986, 92–93, Pl. 134.3; Hrouda 1989, 205, Fig. 2; Oguchi 1998, 129; Bieniada 2009, 171–174; Kulakoğlu and Kangal 2010, Cat. n. 17–19.

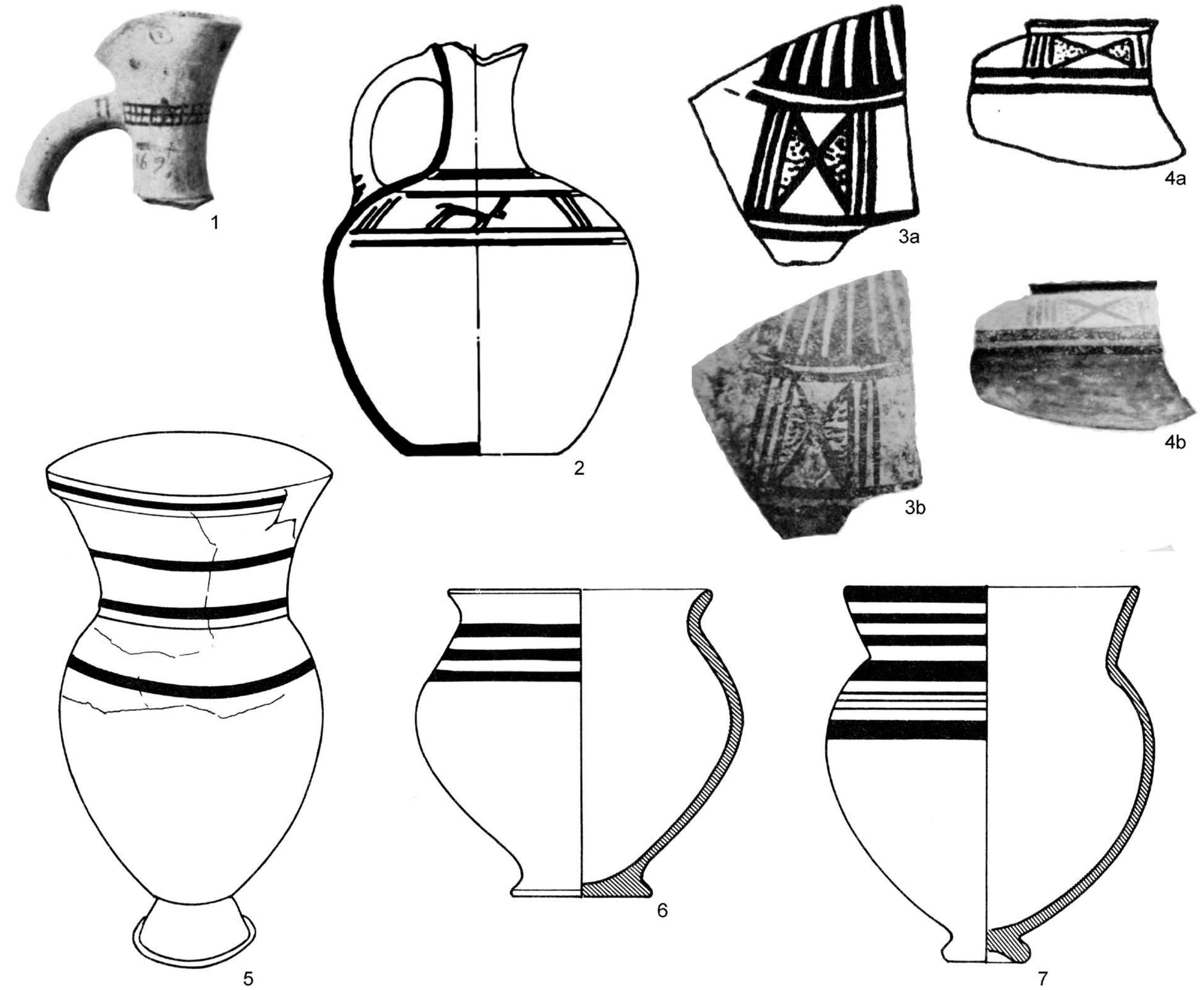

Figure 6: *Imported painted pottery from Kültepe. 1–4) Syro-Cilician Ware from layer IV and II (after Özgüç 1950, Pl. LX.341, 327, 328; Hrouda 1957, Pl. 13.2; Özgüç 1955, Fig. 29a.); 5–7) Khabur Ware from layer Ib (after Hrouda 1989, Fig. 2). Not to scale.*

was found.[46] With this important presentation it became clear that pottery from North-Central Anatolia had a proper autochthonous development which started in the Late Chalcolithic and was characterized by many local and regional peculiarities. These regional and sub-regional diversities also affected the painted pottery. Unfortunately, the following study of painted wares in North-Central Anatolia is marked by overviews written as published or unpublished doctoral theses that are not always easily accessible. In 1973, Armağan Öktü published her PhD dissertation entitled 'Die Intermediate Keramik in Kleinasien'.[47] Some aspects of this work are problematic and not easily comprehensible, like the broad definition that also includes many pieces of the Cappadocian/Alişar III Ware and the division and descriptions of pottery variations, but the classification of the available findings provided the first overview about this painted pottery group. Furthermore, the author compared the Intermediate Ware with other painted ceramics groups like the Cappadocian/Alişar III Ware and the so-called 'Çiradere Ware'. The Çiradere Ware was identified 10 years before by Orthmann following a short-term survey conducted at the eponymous site in the vicinity of Boğazköy.[48] In any case the catalogue presented by

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[46] Orthmann 1963.

[47] Öktü 1973.

[48] Orthmann 1963, 63.

Öktü shows the distribution of all known pieces, offering a useful overview of these wares.[49] Further local peculiarities that characterize the Early Bronze Age painted pottery in North-Central Anatolia have been shown by the investigations at Maltepe/Sivas,[50] where the painted pottery here discovered was sometimes considered as an independent ceramic group.[51]

However, the most important painted pottery group of the Early and Middle Bronze Age, i.e. the Cappadocian/Alişar III Ware, was never comprehensively approached until the study conducted in 1991 by Sachihiro Omura.[52] Unfortunately, this important PhD dissertation, with its extensive catalogue structured according to the find spots of this ware and detailed distribution maps, has not yet been published. In this study, Omura also included material from his own surveys conducted in Western-Central Anatolia, and the definition of another new local group of Early Bronze Age painted pottery, which was called 'Delice Ware'.[53]

The interest shown by the scholarship in the study on the Early Bronze Age North-Central Anatolian painted pottery seems to decrease on the cusp of the new millennium, leaving many doubts still open and a generalized bewilderment about the topic. Nevertheless, some new work has been done in the last years, mainly within the framework of processing material from single excavations. In 2012, Tarık Emre in his master thesis treated the 'Camihöyük Alişar III seramiği', presenting next to the findings of the site an updated distribution of this ware.[54] Recently, another new group of Early Bronze Age painted pottery was defined in the region west of the Kızılırmak river by Jan-Krzysztof Bertram and Güçin İlgezdi Bertram.[55]

Finally, the PhD dissertation 'Painted Ceramic Traditions and Rural Communities in Hittite Anatolia' by Joshua Warren Cannon, defended in 2020 at the University of Chicago, also needs to be mentioned here.[56] Unfortunately, this work presents many scientific problems and it must be treated with full caution. For example, the author claims that the Cappadocian/Alişar III Ware was used by rural communities until the Late Bronze Age without supporting this result with any clear evidence. However, at least, the painted ceramics from Çadır Höyük are correctly presented in the study.

To sum up, in the current unsatisfying state of research it clearly appears that the painted pottery of the late Early and Middle Bronze Age in North-Central Anatolia represents a heterogeneous phenomenon that includes several categories of material and that urgently needs a fresh re-evaluation to dissolve old conceptions and out-of-date denominations.

But what happened after the end of the Kārum age? Following a short 'dark' period in the historical tradition the Hittite State developed during the 17th century BC, forming the first great state structure in Anatolia. However, as previously mentioned, the pottery production does not show any striking break in its development. The ceramics from the early Late Bronze Age, i.e. the Old Hittite period (ca. 1700–1400 BC), show strong connections to the wheel-made slipped and plain pottery of the Kārum age, especially visible in the occurrence of the fine Red Slip Ware. Moreover, few examples of painted decoration, which undoubtedly have their roots in the latest phase of the Kārum period, can be found. The most interesting piece in this respect is a pot with funnel-shaped neck from İnandıktepe (**Figure 7.2**).[57] Although most of

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[49] Öktü 1973, 113–145, 233–258.

[50] Orthmann 1963, 52–54.

[51] Öktü 1973, 136.

[52] Omura 1991a.

[53] Omura 1991b.

[54] Emre 2012.

[55] Bertram and İlgezdi Bertram 2020.

[56] Cannon 2020.

[57] Özgüç 1988, 83–84, Fig. 25–26, Pl. 35, Ia–b.

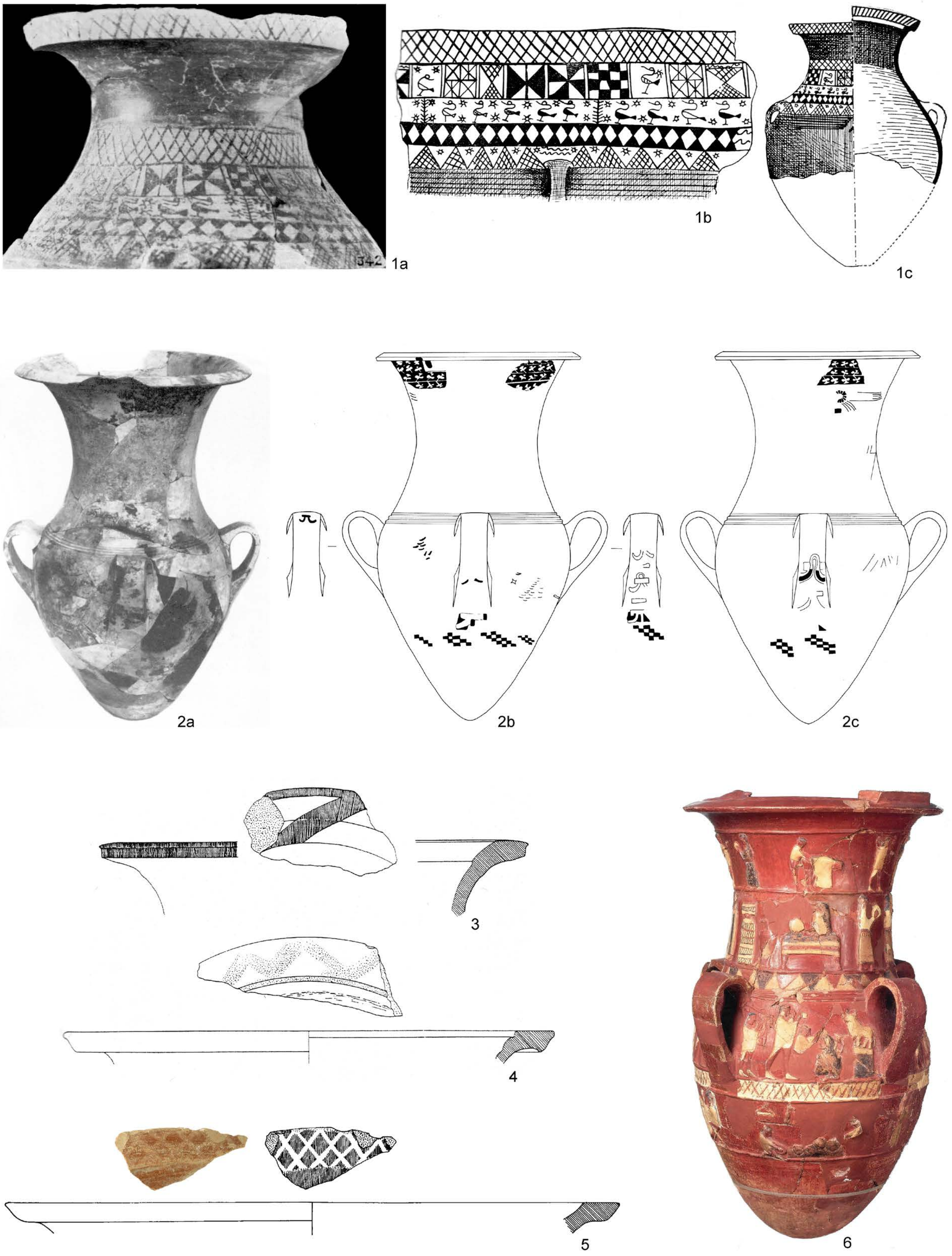

Figure 7: *Hittite painted pottery. 1) Kültepe layer Ib (after Özgüç and Özgüç 1963, Pl. XLIII.342, Pl. LI.469); 2) İnandıktepe (after Özgüç 1988, Pl. 35.1a, Fig. 25–26); 3–5) Boğazköy-Ḫattuša (after Fischer 1963, Taf. 15.159, Taf. 17.213, Taf. 14.154, colour photo: Boğazköy-Excavation); 6) İnandıktepe (after Schoop 2013, Fig. 11). Not to scale.*

the paint disappeared, a vessel with a complete decoration characterized by floral motifs, chequerboard patterns, a winged sun disk, arch signs and possible figurative elements can be identified. Few fragments of funnel-shaped neck pot with painted decoration, probably dated to the Late Bronze Age, are also known from Boğazköy-Hattuša (**Figure 7.3–5**).[58] The shape of the above-mentioned İnandıktepe vessel is closely comparable to the famous relief vases,[59] whereof one of the most well-known examples comes from İnandıktepe itself. The vase dates to the Old Hittite period and shows a painted decoration between relief friezes and moulded figures (**Figure 7.6**).[60] It is important to note that the funnel-shaped neck vessel had a special function within the Hittite pottery repertoire, since not only the painted examples just mentioned belong to this type but also some of the most special decorated specimens of the Hittite period, like the so-called 'tower or battlement vases'.[61] As said, this vessel form with special decoration as well as function started during the Kārum period (**Figure 4.1, 7.1**) with forerunners in the Early Bronze Age (**Figure 3.1**). At this point it is essential to note that the few vessels from İnandıktepe and Boğazköy-Hattuša just mentioned represent the only clear examples of Hittite painted pottery, marking a break in the long tradition of painted decoration in North-Central Anatolia.[62]

A substantial change in pottery production can be observed at the end of the Old Hittite period, with a decrease in the shape variability and ware quality. Indeed, from now on the Plain Ware becomes completely dominant. In this process, which continued with further developments until the end of the Hittite Empire at the very beginning of the 12th century BC, earlier shapes slowly disappear and a repertoire of homogeneous wares and forms increases standardization over time.[63] In this framework, the pots with funnel-shaped neck, which, as said, represent the only examples of Hittite painted pottery, also lost their special function. The background of this development can be seen in the specific socio-political structures of the Hittite State and its society, since during the Late Bronze Age material culture was strongly entangled within the specific social and political conditions of the Hittite world, marking implications also related to the production and consumption of pottery.[64] Indeed, the development of the Hittite pottery repertoire reflects specific centralized economic and social needs in which painted decoration obviously did not play any significant role, to the contrary of what happened in other regions. This connection between state, its economy, its social structure and material culture led to a quick disappearance of the Hittite pottery tradition after the collapse of the empire at the end of the Bronze Age.[65] In this respect, it is very interesting to note that during the Early Iron Age geometric painted pottery appears once again in North-Central Anatolia, following a pattern clearly related to the previous traditions of the late Early and Middle Bronze Age.[66] But this, of course, implies that these painted traditions have been preserved somehow over time, probably in rural peripheral regions where the Hittite influence was not so dominant.[67]

This last piece of evidence allows us to bring the subject back to our main topic. Indeed, each of the contributions included in this volume show that the painted pottery traditions that emerged at the margins of the Hittite State hardly came out of the blue during the Late Bronze Age, rather they always represented the development of previously known Middle Bronze or even Early Bronze Age heritages. But the exact process that led to each single tradition is of course difficult to track. So, are these wares

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[58] Fischer 1963, no. 154 (Büyükkale, unter Schicht III), 159 (Büyükkale, unter Schicht III), 213 (Büyükkaya).

[59] See Mielke 2017, 125–126 with further references.

[60] Özgüç 1988, 84–106, Fig. 27, 64–65, Pl. F–K , Pl. 36–58.

[61] See Mielke 2022, 673–676 and Fig. 13.6.

[62] In the still dominant publication of Franz Fischer (1963, 32–34), more painted pottery assigned to the Late Bronze Age can be found. But most of them should be now definitively dated to the Early Iron Age or connected to the Late Bronze Age Geometric Painted Pottery of the Central Black Sea region (see the contribution of D.P. Mielke in this volume).

[63] For the development of the Hittite pottery production see Schoop 2011a; Mielke 2017; 2022.

[64] See Mielke 2016a; 2022.

[65] Summers 2017, 257–258, 267–268 with further references.

[66] Seeher 2010. See also the detailed discussion presented in this volume in the contribution by D.P. Mielke.

[67] Seeher 2010 with further references.

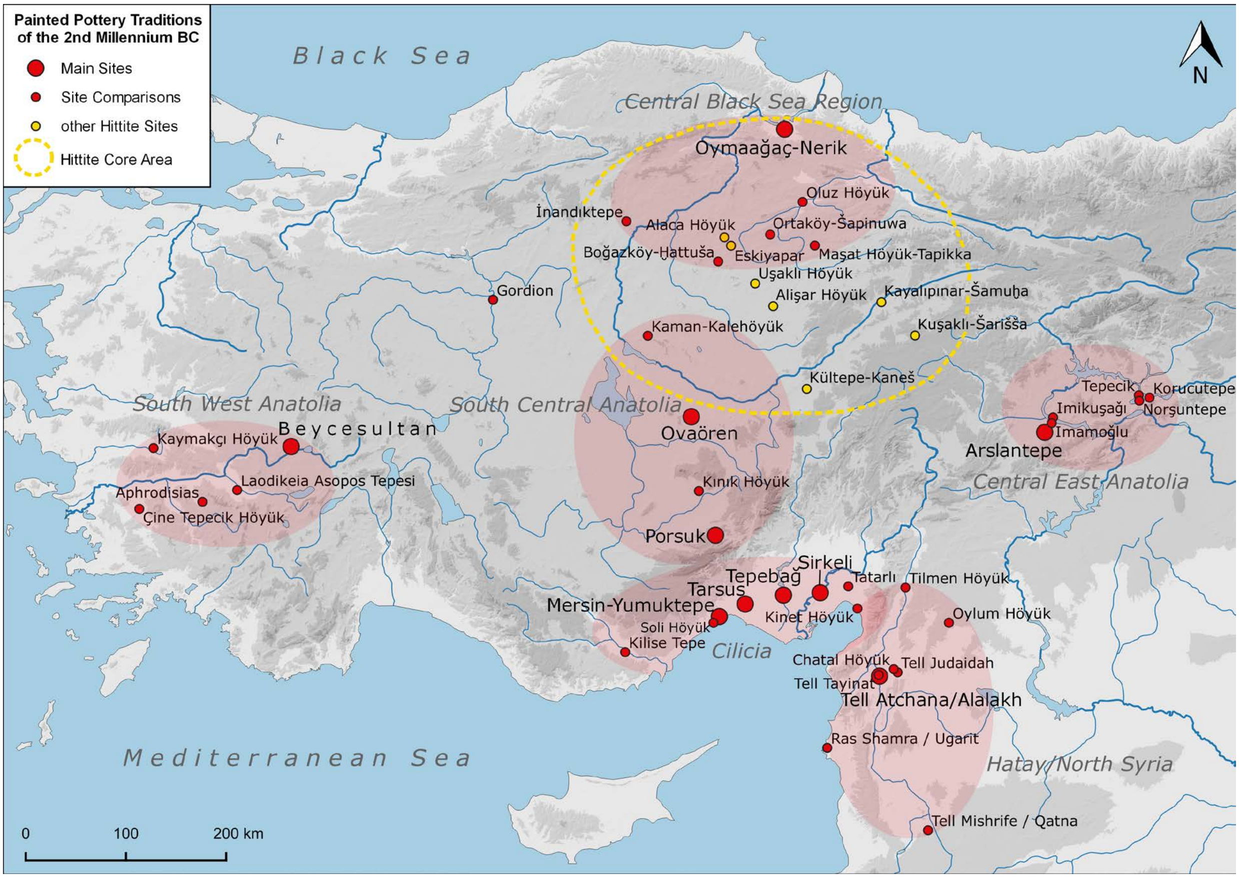
Painted Pottery Traditions of the 2nd Millennium BC
● Main Sites
● Site Comparisons
○ other Hittite Sites
Hittite Core Area
Black Sea
N
Central Black Sea Region
Oymaağaç-Nerik
Oluz Höyük
İnandıktepe
Alaca Höyük
Ortaköy-Šapinuwa
Boğazköy-Ḫattuša
Eskiyapar
Maşat Höyük-Tapikka
Uşaklı Höyük
Gordion
Alişar Höyük
Kayalıpınar-Šamuḫa
Kaman-Kalehöyük
Kuşaklı-Šarišša
Kültepe-Kaneš
Tepecik
Korucutepe
Imikuşağı
Norşuntepe
Imamoğlu
Arslantepe
Central East Anatolia
South West Anatolia
South Central Anatolia
Kaymakçı Höyük
Beycesultan
Ovaören
Laodikeia Asopos Tepesi
Aphrodisias
Çine Tepecik Höyük
Kınık Höyük
Porsuk
Sirkeli
Tepebağ
Tarsus
Tatarlı
Tilmen Höyük
Mersin-Yumuktepe
Kinet Höyük
Oylum Höyük
Soli Höyük
Kilise Tepe
Cilicia
Chatal Höyük
Tell Judaidah
Tell Tayinat
Tell Atchana/Alalakh
Ras Shamra / Ugarit
Hatay/North Syria
Mediterranean Sea
Tell Mishrife / Qatna
0
100
200 km

Figure 8: *Painted pottery traditions at the margins of the Hittite State. Pottery regions, mains sites presented in this volume and further comparisons (map: D.P. Mielke).*

the consequence of local continuities, the re-emergence of old traditions, or the result of more complex mutual influences and trajectories of cultural development?

In order to appropriately deal with these topics and all the above-mentioned problematics, the articles presented in the book follow two main perspectives. Chronologically, they aim at identifying what characterizes each single site or region before and after the appearance of the Late Bronze Age painted pottery phenomenon, while geographically they intend to recognize cultural borders as well as potential contacts and interactions. Indeed, each contribution presents a detailed analysis of the local painted pottery repertoire from a distinctive site belonging to a specific region. Pottery decorations, associated forms, fabrics, and main contexts of discovery are analysed. Moreover, wider regional and extra-regional connections are highlighted so as to pursue chronological, geo-political and historical aspects. Complementary multi-disciplinary approaches involving archaeometrical analyses are also adopted for evaluating the relationships and possible origins of the painted productions in the Early or the Middle Bronze Age as well as aspects of continuity or discontinuity into the Iron Age.

The book takes into consideration the Late Bronze Age painted pottery traditions of six main regions (**Figure 8**). The first two articles are devoted to the situation of the Central Black Sea area and specifically the site of Oymaağaç Höyük (by Dirk Paul Mielke / Mustafa Kibaroğlu, Sonja Behrendt, Tillmann Viefhaus and Dirk Paul Mielke) and the connections between the Hittites and the so-called ‘Kaška’ peoples. The painted pottery tradition of South-Western Anatolia and its connections with the Aegean world is the topic of the paper by Fulya Dedeoğlu and Erim Konakçı, mostly dedicated to the analysis

Ware Groups	Wares' Definition	Site	LBA Chronology	Potential Distribution	Possible Origin	Further Contacts
Geometric Wares	Late Bronze Geometric Ware	Alalakh	Period 6-1	Amuq	Syro-Cilician and Khabur wares	Jezirah
	Geometric Painting	Arslantepe	LBA I-LBA II	Upper Euphrates	Syro-Cilician and Khabur wares	Cilicia, Jezirah
	Local Painted Pottery	Beycesultan	Level Ib/5a-4/Ia	Upper Meander Basin		Mycenaean Coastal Anatolia, Cilicia
	Geometric Painted Pottery	Oymaağaç Höyük	LBA	Central Black Sea Region	Central Black Sea Region, North-Central Anatolia	North-Central Anatolia
Cross-Hatched Wares	Hatched-decorated pottery	Ovaören	Hittite Imperial Period	Cilicia, South-Central Anatolia	Cilician Cross-hatched Ware	
	Cross-hatched Ware	Sirkeli Höyük	LBA II	Western Cilicia		
	Cilician Painted Ware	Tarsus	LBA IIb	Western Cilicia		
	Cross-Hatched Red Painted Pottery	Yumuktepe	LBA II	Western Cilicia	LBA Cilician Red Painted pottery	
Wavy-Line Wares	Monochrome or Bichrome Painted Wavy-line Ware	Sirkeli	LBA I-LBA II			
		Tarsus	LBA I-LBA II	Cilicia		
Syro-Cilician Wares	Syro-Cilician Ware	Alalakh	Period 7-6	Cilicia, Amuq	Alalakh 16-8	
	Syro-Cilician Painted Ware	Porsuk	LBA I	Cilicia, Amuq, South-Central Anatolia	MBA Syro-Cilician region	
		Sirkeli Höyük	LBA I	Cilicia, Amuq	MBA Syro-Cilician region	
Red Band Wares	Banded Ware	Alalakh	Period 6-1	Cilicia, Amuq	MBA Khabur	Jezirah
	Red Slip Ware					
	Decorative slip	Arslantepe	Period VB-IV	Upper Euphrates, Cilicia	MBA South-Central Anatolia	Jezirah
	Red band plates, bowls and jars	Ovaören	Hittite Imperial Period			
	Red Slip Ware	Sirkeli Höyük	LBA I-LBA II	Cilicia	MBA South-Central Anatolia	Syro-Mesopotamian Region
	Red-edged Ware					
	Red-banded Ware					
	Red Slip Ware					
	Bowls with band decorated rims	Tarsus	LBA I-LBA IIb			
	Red Band Decorated Pottery	Tepebağ	LBA II	Cilicia	MBA South-Central Anatolia	Jezirah, North-Central Anatolia
Other Wares	Local Nuzi Ware	Alalakh	Period 4-1	Alalakh	Mitannian-Khabur region	Minoan world
	Drip marks	Arslantepe	LBA I	Arslantepe		Upper Tigris

Table 1: *Late Bronze Age painted pottery. Ware groups definition, chronology, distribution, origin and spread (for correspondences between the chronological abbreviations used in the table and the absolute dating see the single contributions in the volume).*

of material from Beycesultan. The situation of South-Central Anatolia and the Cappadocian region is described in two articles presenting material from Ovaören (S. Yücel Şenyurt and Atakan Akçay) and Porsuk (Alvise Matessi) which emphasize fascinating connections between the proper Hittite core and the southern territories. The Cilicia plain reveals itself as a very fruitful region within the topic; the four articles by Éric Jean (Yumuktepe), Elif Ünlü (Tarsus), Deniz Yaşin and Belgin Aksoy (Tepebağ) and Ekin Kozal (Sirkeli Höyük) show the manifold ways in which the local traditions, the Hittite influence and the Levantine cultural sphere interweave. The following two contributions illustrate the situation of the Upper Euphrates area and especially the role played by the site of Arslantepe (Federico Manuelli / Pamela Fragnoli and Alexandra Rodler) within a complex pattern of multidirectional interactions. Lastly, the importance of the Northern Levant, as a crossroad between several cultural worlds and systems, is shown through materials coming from Alalakh (Mara T. Horowitz). In a concluding section, Hermann Genz and Geoffrey Summers offer some final remarks concerning aspects of regionalism and community associated to this topic and more in-depth considerations about the historical significance related to the lack of painted traditions in Hittite North-Central Anatolia.

Putting the contributions for this book together it clearly appears that, despite the existence of cultural and geographical borders, some of the above-mentioned regions are deeply interrelated. Indeed, the painted pottery treated in these articles can be gathered into six main ware groups which show both elements of local development as well as extra-regional relationships (**Table 1**). The 'Geometric Wares' group does not represent a proper coherent category, but rather an assemblage of wares that are characterized by similar patterns that do not share specific common roots, as is especially evident for the Geometric Painted Pottery of Oymaağaç Höyük and the Local Painted Pottery of Beycesultan, which are strictly related to the Central Black Sea and the Costal Anatolian traditions respectively. However, some affinities can be seen in the Geometric Painting of Arslantepe and the Geometric Ware of Alalakh, which both show potential developments from the Middle Bronze Age traditions of the Syro-Cilician Wares and the Khabur Ware, rather than possible contacts with the Cilician Wavy-Line Wares. The 'Cross-Hatched Wares' group represents in contrast a consistent collection that originated and spread during the Late Bronze Age and up to the transition to the Iron Age in Western Cilicia only, with some sporadic connections with South-Central Anatolia. Similarly, the 'Wavy-Line Wares' group appears to be a regional phenomenon restricted to Late Bronze Age Cilicia, although influences and mutual contacts with the Geometric Wares of the Upper Euphrates and Northern Syria cannot be excluded. In contrast, the Wavy Line pottery of the Kārum period of North-Central Anatolia (**Figure 4**) is a completely different phenomenon. The 'Syro-Cilician Wares' group coherently developed from the Middle Bronze Age traditions of Northern Syria and Cilicia, showing a wide range of contacts and influences that reach South-Central Anatolia and the Upper Euphrates. Definitively more heterogeneous is the 'Red Band Wares' group, which includes great varieties of wares, whereof the distinction between proper band painted decorations and decorative coloured slips is of course not always definable. However, the wares gathered in this group, which mostly spread in Cilicia but are also attested north of the Taurus mountains in Cappadocia or along the Upper Euphrates river, most probably originated from the Middle Bronze Age tradition of South-Central Anatolia, although fascinating contacts with the Syro-Mesopotamian word are also plausible. Lastly, the category 'Other Wares' includes local examples of Nuzi Ware from Alalakh and Drip Marks from Arslantepe that emphasize contacts with the Khabur and Upper Tigris regions, respectively.

It is therefore interesting to stress that while the painted pottery traditions of South-Western Anatolia and the Central Back Sea region mostly show two independent and isolated regional developments in the current state of research, the areas eastwards and (mostly) southwards of the Hittite core unveil instead a manifold system of interrelations. The Red Slip Ware of Middle Bronze Age South-Central Anatolia, which was well-attested in the Hittite motherland at the beginning of the Late Bronze Age, seems to spread with its variations to Cilicia through South-Central Anatolia itself in the exact moment when its popularity decreases within the Hittite world. In this respect, the findings of Ovaören on a unique band decoration on Hittite pottery forms are of particular interest. The continuity of the connections that have linked South-Central Anatolia to Cilicia as well as to the Amuq in the Middle Bronze Age through the development of Syro-Cilician Wares, which seems to have reached, to a lesser extent, also the Upper Euphrates, is shown during the Late Bronze Age by the spread in these regions of the Red Band Wares, although connections with Northern Mesopotamia cannot be excluded. Moreover, further relationships between South-Central Anatolia and Cilicia are also emphasized by the presence of Cross-Hatched Wares as well as by the very fascinating cases, in both regions, of typical Hittite shapes with painted decorations, a phenomenon which, as said, is completely unknown to the Hittite motherland.

In the following pages the detailed data from which these observations originated from are presented in great detail. The intent is to break through the boundaries usually imposed by the study of the 2nd millennium BC pottery production in Anatolia and to reconstruct a comprehensive scenario concerning the appearance, evolution and related historical meanings of the Late Bronze Age painted pottery traditions at the margin of the Hittite State.

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Geometric Painted Pottery of the 2nd Millennium BC in the Central Black Sea Region. A Contribution to the Archaeology of the Kaška

Dirk Paul Mielke

Abstract

During the excavations in Oymaağaç Höyük – the Hittite cult city of Nerik – situated in the Central Black Sea region near modern Vezirköprü (Samsun province), a previously unknown group of geometric painted pottery was discovered. This new pottery can be dated to the Late Bronze Age and was found alongside with the dominant Hittite plain pottery. Following a detailed analysis and a comparison with similar findings from other sites at the northern edge of the Hittite Empire, it becomes evident that this ceramic group can be understood as belonging to an independent regional pottery tradition of the Central Black Sea region that continued, with some modifications, into the Early Iron Age. Furthermore, it is more than likely that this geometric painted pottery tradition of the 2nd millennium BC can be connected to the so-called Kaška people, who were resident in the Black Sea region according to written sources. Until now, the Kaška were only known from the Hittite historical tradition. With the findings from Oymaağaç Höyük, they can be grasped for the first time through archaeological sources.

Keywords

Oymaağaç Höyük, Nerik, Late Bronze Age, Geometric Painted Pottery, Kaška

Özet

Orta Karadeniz Bölgesi'nde Samsun'a bağlı Vezirköprü ilçe sınırları içinde yer alan Hitit kült merkezi Nerik, ya da günümüzdeki adı ile Oymaağaç Höyük'te yürütülen kazılar sırasında, daha önce bilinmeyen geometrik boya bezemeli bir grup çanak çömlek ele geçirilmiştir. Bu yeni seramik grubu Geç Tunç Çağı'na tarihlenmekte olup, baskın Hitit sade malları ile beraber ortaya çıkarılmıştır. Hitit İmparatorluğu'nun kuzey sınırı boyunca yer alan diğer merkezlerden benzer buluntular ile yapılan karşılaştırma ve ayrıntılı bir analizin ardından, bu seramik grubunun, Orta Karadeniz Bölgesi'ne özgü, bazı değişikliklerle Erken Demir Çağı'na kadar devam eden, bağımsız bölgesel bir geleneğe ait olabileceği açıklık kazanmıştır. Dahası İÖ 2. bine ait söz konusu geometrik boya bezemeli seramik geleneğinin yazılı kaynaklara göre Karadeniz Bölgesi halkı olan Kaškalar ile ilişkilendirilmesi mümkün görünmektedir. Şimdiye değin Kaškalar sadece Hitit tarihsel geleneğinden bilinmekteydi. Oymaağaç Höyüğü buluntuları ile birlikte ilk defa arkeolojik kaynaklar tarafından saptanabilmektedirler.

Anahtar Kelimeler

Oymaağaç Höyük, Nerik, Geç Tunç Çağı, Geometrik boyalı seramik, Kaškalar

LATE BRONZE AGE PAINTED POTTERY TRADITIONS (ARCHAEOPRESS 2022): 21–58

Introduction

The northern periphery of the Hittite Empire, the Central Black Sea region, is one of the Anatolian regions that requires more extensive research from an archaeological point of view.[1] This is especially true for the 2nd millennium BC, and it is noteworthy that many academic papers have been written about the few things that are known from this area. The region between the modern cities of Sinop, Samsun, Amasya and Merzifon is largely dominated by the Pontic mountains, but the amazing diversity of the landscape makes such a generalisation problematic and inaccurate. Of special importance for the geography of the territory is the most important river of Asia Minor, the Kızılırmak. The river, called Maraššant(iy)a by the Hittites, encloses the core region of the Hittite State in Central Anatolia, before making its way through the mountains near the small city of Kargı to flow into the Black Sea near Bafra.[2] In doing so, the river provides the main traffic and communication route in this area. It also played a strategic role during Hittite times.

Based on written Hittite sources, the political history of the northern periphery of the empire can be described in broader terms.[3] Of great importance for the Old Hittite period and the Hittite Kingship were the cities of Zalpa, Nerik and Ḫakmiš, which are thought to have been located within this region, but few sources exist for this early period. Particularly from the Middle Hittite period onwards, the region came into the focus of historical tradition as the Kaška people appeared in the Hittite cuneiform texts as a regional ethnic group contesting the Hittites' supremacy in the region.[4] These Kaška people, historically documented only from the Hittite sources, have inspired the imagination of many scholars and generated a controversial debate, in particular about their culture, because they are not tangible from an archaeological perspective.[5] In the 15th century BC, the Hittite State seemed to lose control over the region, and the Kaška even threatened the core area of Central Anatolia. During the course of the 14th century BC, the Hittites had to frequently campaign in the northern regions in order to contain the danger posed by the Kaška. It was not until the mid-13th century BC that Great King Ḫattušili III succeeded in regaining larger areas of the northern regions for the Hittite Empire and reviving the old cults of Nerik.

In contrast, for a long time there was limited archaeological information available about the Central Black Sea region in the 2nd millennium BC, due to a lack of substantial and long-lasting excavations. Only İkiztepe, situated near the embouchure of the Kızılırmak, was a notable exception, but the occupation of this site ended after the Middle Bronze Age, and no Late Bronze Age layers have been attested so far.[6] Additionally, some minor, older excavations and several older surveys have been subject to rather superficial evaluation.[7] In recent years, however, new research has brought important discoveries to light, so that the archaeological picture of this region has begun to change little by little. As well as the excavations of Oluz Höyük near Amasya, research conducted at Oymaağaç Höyük near Vezirköprü must be mentioned. This site is of particular significance because it has been identified as the location of the Hittite city of Nerik and the excavations brought to light a previously unknown kind of geometric painted pottery from the Late Bronze Age. This pottery is also of particular historical significance because it is more than likely that it can be connected to the elusive Kaška people.[8] Therefore, the discovery of this

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[1] For an overview of the current state of research, cf. Glatz 2017 and Büyükakmanlar-Naiboğlu 2011.

[2] For the textual sources on the river, cf. Frantz-Szabó 1987–1990.

[3] Klinger 2008. For the Hittite geography of this region, cf. the overview by Corti 2007.

[4] Important publications about the Kaška are: von Schuler 1965; Klinger 2002; 2005; Glatz and Matthews 2005; Singer 2007; Gerçek 2012; Murat 2016.

[5] For example, Yakar 2008.

[6] Bilgi 2001, 24 footnote 8.

[7] Cf. the overview of the state of research presented by Dönmez 2002 and Dönmez and Beyazıt 2008.

[8] Rahtz 1975.

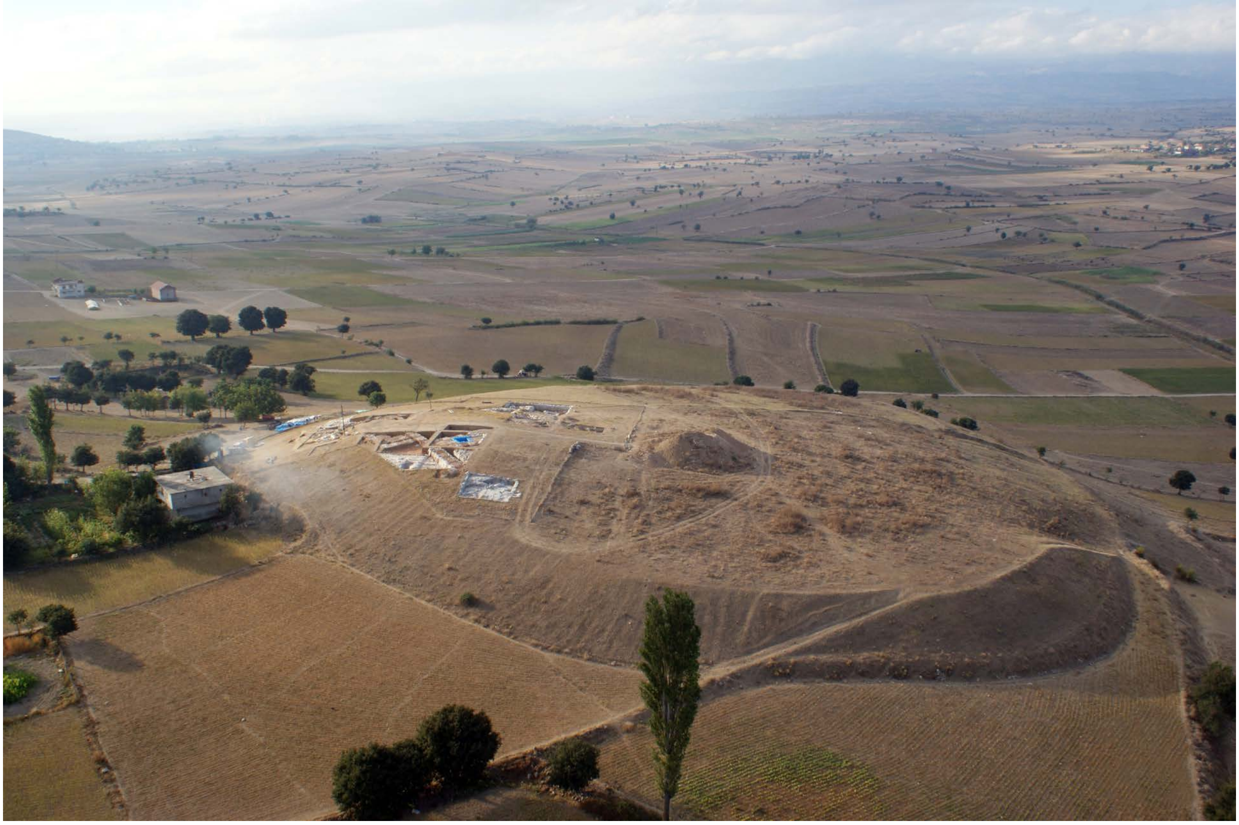

Figure 1: *Aerial photo of Oymaağaç Höyük taken in 2011, with the view to the south and the fertile valley of Vezirköprü in the background (photo: Orhan Özgülbaş, Türk Hava Kurumu / Oymaağaç-Project).*

new pottery group may be described as a sensation or 'perhaps one of the most intriguing discoveries for Anatolian archaeology'.[9] This contribution will provide an overview of the archaeological contexts as well as a general description and characterisation of this new painted pottery group. In doing so, both the stages and the challenges of the archaeological exploration of this pottery will also be discussed. Furthermore, a look at comparable pottery findings and a historical interpretation of the outstanding discoveries from Oymaağaç Höyük will be presented.

Excavations at Oymaağaç Höyük

The site is located at the northern end of the fertile basin of Vezirköprü, next to the small village of Oymaağaç and is favourably situated in terms of geography (**Figure 1**). At the southern end of the basin, around 15 kilometres from the höyük, the silver- and copper-rich Tavşan dağları are situated. These important mountains extend between the modern cities of Vezirköprü, Havza and Merzifon and can possibly be identified with the Hittite Ḫarḫawa mountains.[10] Around seven kilometres to the north, the Kızılırmak flows from west to east and offers with a ford located near an impressive canyon one of the main routes through the mountains of the Küre dağları to the Black Sea coast. The site offers the best conditions for controlling the basin as well as the traffic routes to the north, and this explains the importance of Oymaağaç Höyük from the Chalcolithic period right up until antiquity. The situation changed when the city of Neapolis/Neoclaudiopolis – present-day Vezirköprü – was founded by Pompey

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[9] Cf. Glatz 2017, 75.

[10] Alparslan 2010, 36.

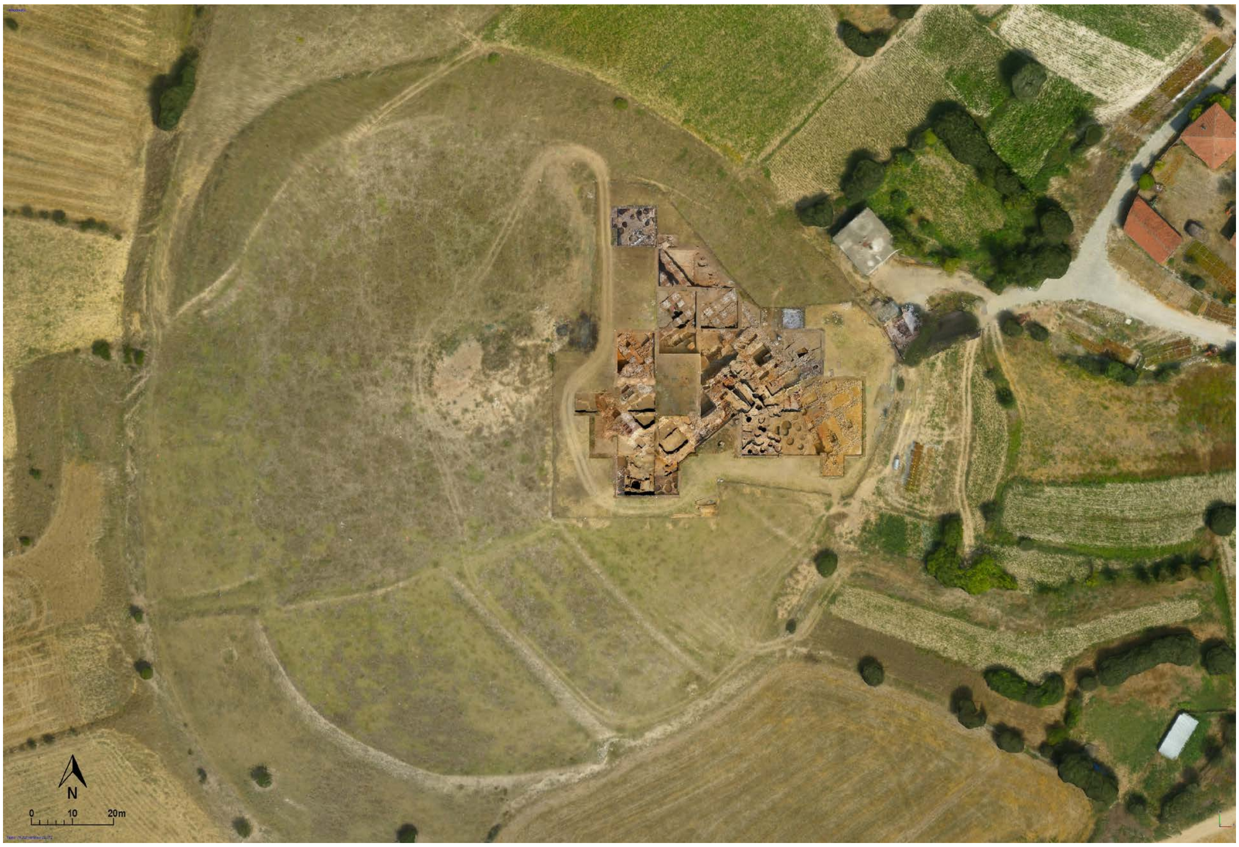

Figure 2: *Combined orthophoto with the final state of the excavation results until 2019 at Oymaağaç Höyük (photo: Monika Lehmann).*

the Great in the 1st century BC.[11] During this time, the route to the north across the Kızılırmak lost its importance. Since the 1980s, the river has been dammed in its lower course by the very long Altınkaya baraj, which completely cuts off the former traffic routes.

The höyük of Oymaağaç is located on a natural travertine rock, where the first settlement was founded during the Chalcolithic period in the 5th millennium BC. The site is oval in shape, measuring 200 by 190 metres (**Figure 2**). At the outset of the excavation there were hardly any archaeological traces above ground because most areas of the höyük have been ploughed in modern times. For the archaeological science, the 'Hüyük Tepe' near Oymaağaç was discovered during a survey carried out by Uluğ Bahadır Alkım in the early 1970s,[12] but actual scientific research did not begin until 2005, when a two-year survey, led by Rainer Maria Czichon and Jörg Klinger, was carried out on the höyük itself and the surrounding area.[13] In continuation of this work, the first excavations were carried out in 2007 and continue to this day.[14] In 2018, the excavation was officially converted into a Turkish project. The primary aim of the research project is to investigate the origin and development of Hittite culture in the Central Black Sea region.

After this comparatively long period of research, the excavations have yielded a great variety of new insights into the history and archaeology of the North-Central Black Sea region, which are currently

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[11] Kıvrak *et al.* 2015.

[12] Alkım 1975, 6 with Fig. 9–11.

[13] Czichon *et al.* 2006; Czichon 2009.

[14] Czichon *et al.* 2011; 2016; 2019; Czichon 2013; 2015.

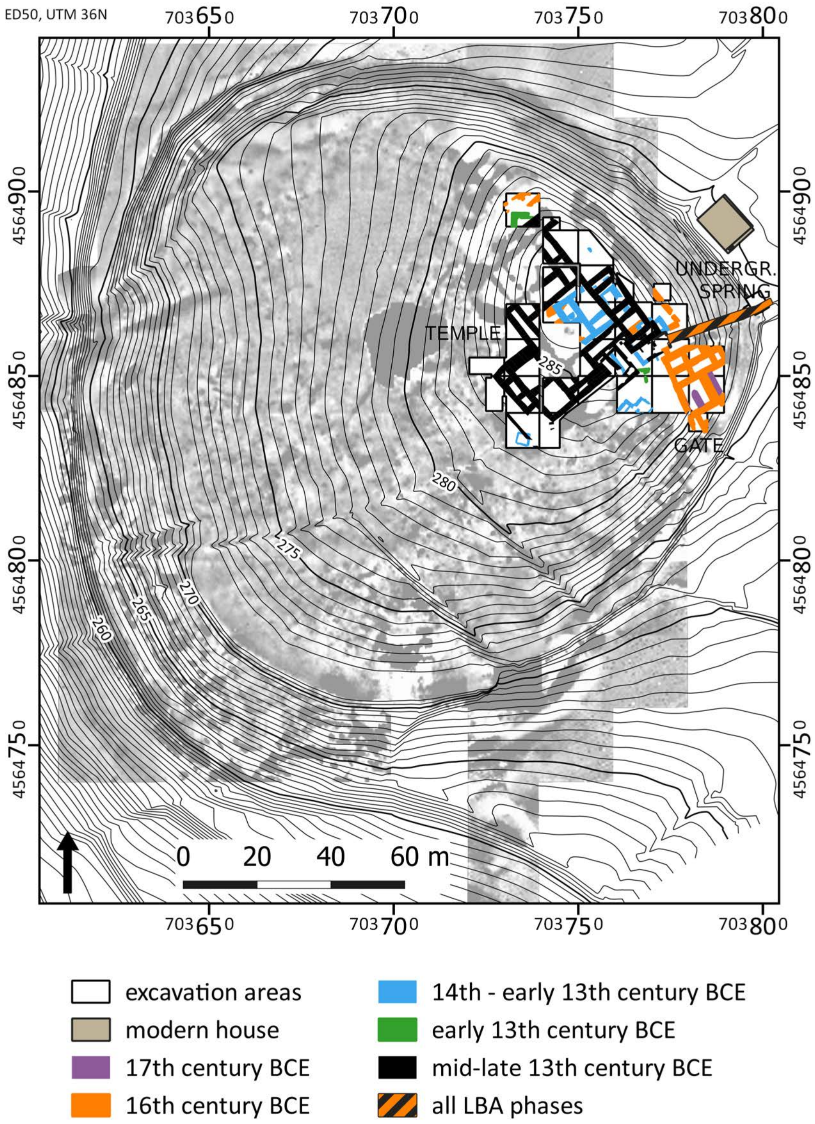
ED50, UTM 36N
703650
703700
703750
703800
4564900
4564850
4564800
4564750
TEMPLE
UNDERGR. SPRING
GATE
285
280
275
270
265
260
0 20 40 60 m
excavation areas
modern house
17th century BCE
16th century BCE
14th - early 13th century BCE
early 13th century BCE
mid-late 13th century BCE
all LBA phases

Figure 3: *Map of the excavation results at Oymaağaç Höyük until 2019 with topography and geophysical prospection in the background (map: Pavol Hnila).*

being evaluated for a final publication. For example, Oymaağaç Höyük is, to date, the northernmost archaeological site that has produced substantial remains of Hittite material culture. The discovery of cuneiform tablet fragments during the excavations made it more than likely that the site can be identified with the cult city of Nerik, known from the Hittite text corpus.[15] Due to its location in a border region, the city of Nerik had an eventful history, which is also reflected in the archaeological record. A geophysical survey was carried out before the excavations and brought to light the ground plan of a monumental building complex on the central hilltop.[16] From the very beginning of the excavation, it was assumed that this structure might be the temple of the weather god of Nerik, a building that archaeologists already knew due to references to it in historical texts (**Figure 3**). The excavation and exploration of the approximately 2.500-square-metre building was one of the central aims of the work.[17]

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[15] Haas 1970; Klinger 2011; 2016; 2019.

[16] Von der Osten-Woldenburg 2011; 2016.

[17] Czichon 2011a; Hnila 2016a.

Another focus was given to a postern-like underground passage, which was exposed fully after 10 years of laborious work and which may probably be identified with the weather god's 'spring of Nerik', also referenced in historic written sources.[18] In addition, a city gate with a more or less complete ground plan was recorded during the excavation work.[19] These buildings from the Late Bronze Age dominated the excavations, but numerous other discoveries in the investigated trenches have revealed Oymaağaç Höyük's complex settlement history, which started in the Chalcolithic period and continued until the Late Iron Age. A Hellenistic-Roman-Byzantine cemetery represents the last archaeological traces, but the bulk of the excavated structures date back to the Late Bronze Age.[20]

Since 2014, the Oymaağaç excavation team has also been working intensively on processing of the Hittite pottery, and it is now clear that the findings from Nerik are in line with the current scientific picture of the highly standardised Hittite pottery, well-known from other Central Anatolian sites such as Boğazköy-Ḫattuša and Kuşaklı-Šarišša.[21] Apart from the dominant and mostly plain Hittite pottery, we were gradually able to identify a new and previously unknown group of geometric painted pottery from the Late Bronze Age.[22] Before it became clear from an intensive stratigraphic analysis that we were dealing with a ceramic group from the Late Bronze Age, these pottery findings had been classified as belonging to the Iron Age because of their painted decoration.

Stratigraphy – context situation – absolute dating

The höyük of Oymaağaç has a complex stratigraphy that affected the understanding of the newly discovered painted pottery. Since stratigraphic evaluation of the evidence from the Late Bronze Age is still in process, only a short and simplified overview can be presented here.[23] In the excavated area on the top of the höyük, the monumental temple building is the dominant structure (**Figure 3**). According to radiocarbon dating, this building was erected sometime after the middle of the 13th century BC.[24] Unfortunately, due to the aforementioned ploughing activities and the particularly intensive erosion on the highest point of the hill, none of the temple's living floors have been preserved. However, many building phases have been identified, especially in the entrance area. Furthermore, two monumental predecessor buildings were detected, which also dated back to the Late Bronze Age.[25] Of these buildings, only parts have been excavated, in the deep soundings between the walls of the later temple. It is remarkable that in ancient times the foundations of these earlier buildings were partly uncovered very deeply and looted in order to get to the stones and use them for the construction of the later temple.[26] Afterwards, the robbing trenches were filled in again. The same puzzling situation, which was first recognised in 2016, was observed in the area of the city gate. Finally, in the area between the temple entrance, the city gate and the access to the underground spring, a lot of depositions, accumulations and small building activities from the Late Bronze Age came to light. Furthermore, hundreds of pits from the Iron Age and numerous graves from the Hellenistic-Roman-Byzantine cemetery massively disturbed the Late Bronze Age structures and layers (**Figure 2**).[27] The countless interventions that occurred in this comparatively small area during the Late Bronze Age – from the end of the 17th until the 13th century BC – and the diverse formation processes that took place during and after the occupation of the site resulted in an extremely complex stratigraphic situation. This also means that the pottery findings are generally fragmented and connected to secondary contexts like fills, accumulations, dumps and depositions. Only few pottery findings can be related to occupation layers, but in one room within the city gate a living floor that contains archaeological in-situ material has been preserved.[28] Unfortunately, the ceramic inventory of this room did not contain any examples of the painted pottery.

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[18] Eerbeck 2011a; Mielke 2016a; 2019. The spring was mentioned on the cuneiform tablet KUB 36.90 rev. 32.

[19] Eerbeck 2011b; Weber 2016.

[20] For the Hellenistic-Roman-Byzantine cemetery, cf. the overview of Hnila 2016b.

[21] Mielke 2016b, 42–50; 2019b, 69–75. For Boğazköy-Ḫattuša, cf. Fischer 1963 and Müller-Karpe 1988, for Kuşaklı-Šarišša cf. Mielke 2006a.

[22] Mielke 2016b, 50–52; 2019b, 75–83.

[23] A first overview was presented by Hnila 2016c; 2019a.

[24] Hnila 2019b.

[25] Hnila 2019a, 47–53.

[26] Hnila 2016a, 21 and Abb. 8.

[27] Cf. Czichon *et al.* 2019, Abb. 9.

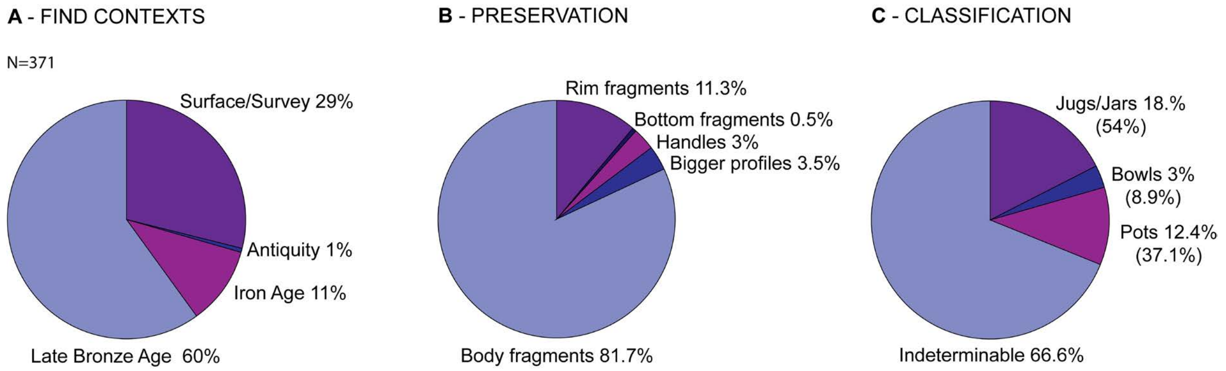

Figure 4: *Statistical charts on the Late Bronze Age geometric painted pottery from Oymaağaç Höyük: A) find contexts; B) state of preservation; C) typological classification (graphic: Dirk Paul Mielke).*

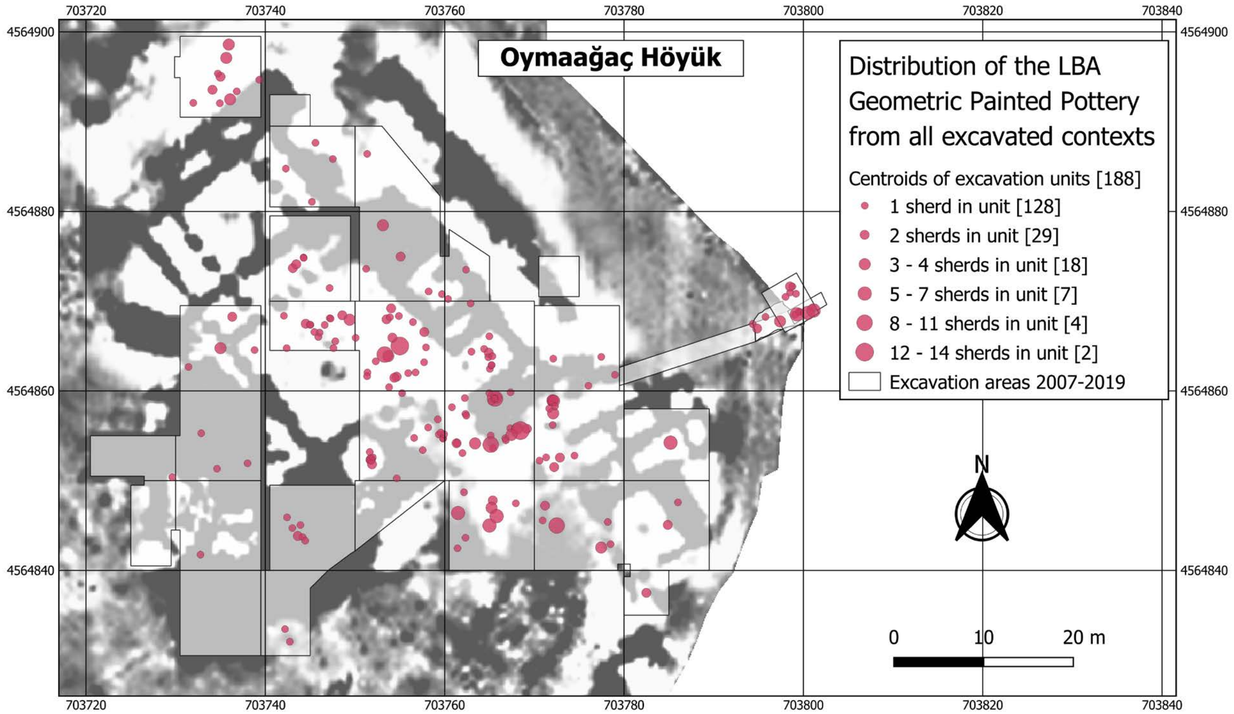
703720
703740
703760
703780
703800
703820
703840
4564900
4564880
4564860
4564840
Oymaağaç Höyük
Distribution of the LBA Geometric Painted Pottery from all excavated contexts
Centroids of excavation units [188]
1 sherd in unit [128]
2 sherds in unit [29]
3 - 4 sherds in unit [18]
5 - 7 sherds in unit [7]
8 - 11 sherds in unit [4]
12 - 14 sherds in unit [2]
Excavation areas 2007-2019
N
0
10
20 m

Figure 5: *Distribution map of Late Bronze Age geometric painted pottery finds until 2019 from excavated contexts at Oymaağaç Höyük as well as excavated trenches and geophysical prospection in the background (map: Pavol Hnila).*

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[28] Czichon 2011b.

Nevertheless, the fine stratigraphic excavations demonstrated clearly that the newly discovered painted pottery belongs to the Late Bronze Age (**Figure 4.A**). With a share of 60%, the great bulk of the material comes from Late Bronze Age layers. Around 12% was found in Iron Age pits and graves of the Hellenistic-Roman-Byzantine cemetery as deposition fillings and must be interpreted as relocated. Finally, 29% comes from the disturbed surface zone, of which slightly more than half came to light during the first surface survey, carried out in 2005 and 2006 – prior to the excavations. Currently, it seems that the production of this kind of painted pottery started with a few examples in the 16th century and reached its peak in the 15th and 14th centuries BC in the time before the erection of the later temple, which took place around the second half of the 13th century BC. But the painted pottery was still in production and use even after the erection of the later temple, just in smaller amounts. Fragments of the painted pottery were found in all the excavated trenches (**Figure 5**), and thanks to their characteristics, which will be presented in the next paragraph, they can now be easily identified and distinguished from the handmade painted Iron Age pottery.

The Late Bronze Age Geometric Painted Pottery from Oymaağaç Höyük

By the end of the 2019 campaign, 379 fragments of the Late Bronze Age geometric painted pottery were detected. During the intensive processing of the pottery that followed, it was possible to join eight of these pieces to other fragments, leaving a total of 371 single items available for further studies (**Figure 4**). At that time (end of 2019) these items represented around 3% of the entire Late Bronze Age pottery corpus from Oymaağaç Höyük. Because of the previously described context situation, the corpus of the geometric painted pottery consists only of fragments. To date, no complete vessel belonging to this group has been found at Oymaağaç Höyük. Thus, we faced the problem of reconstructing an unknown ceramic group and its vessel repertoire from fragments. After the first intensive round of work on the material was complete in 2016, we were able to establish a preliminary characterisation of the findings.[29] During the 2018 campaign, the intensive and time-consuming processing of all the pieces that have come to light so far yielded many important insights into this new pottery group.[30] In the last study season which took place in 2019, the repertoire was supplemented by newly discovered fragments from the material of the surface survey of 2005–2006, which in turn led to a confirmation and slight expansion of the spectrum of shapes. Before going into detail about the vessel repertoire, a short look at the technological characteristics and the painted decoration will be provided.

Firstly, all pieces of the Late Bronze Age geometric painted pottery were made on a fast-rotating potter's wheel, which can be easily observed for nearly all fragments and especially on the inside of closed vessel forms, which generally show fine and narrow rilling or rather wheel marks (**Figure 6.d**). The painted pottery fragments are all of a good quality, which means that every vessel was carefully produced. Also, the clay was well prepared with mineral temper of small or middle size, although occasionally larger inclusions can be found as well. When comparing the various fragments, it becomes clear that the clay matrix of the individual pieces is comparatively homogeneous, with only small variations (**Figure 7**). Therefore, we decided to make no further differentiation and classified, from a macroscopic point of view, all pieces as belonging to one type of ware, denominated as 'Late Bronze Age Geometric Painted Ware (LBA GPW)'. We also conducted archaeometric analyses to investigate the chemical and mineralogical composition of the pottery in order to answer questions of provenance, firing temperature, colour, etc. The basic results of these analyses are presented and discussed in a further contribution to this volume by Mustafa Kibaroğlu, Sonja Behrendt, Tillmann Viefhaus and the author. Not surprisingly, the firing of all the pieces was also of consistently good quality. The painted ceramic pieces were fired in an oxidizing atmosphere. Based on the analysis of petrographic data, Mustafa Kibaroğlu estimated a temperature

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[29] Mielke 2016b, 50–52.

[30] Mielke 2019, 75–81.

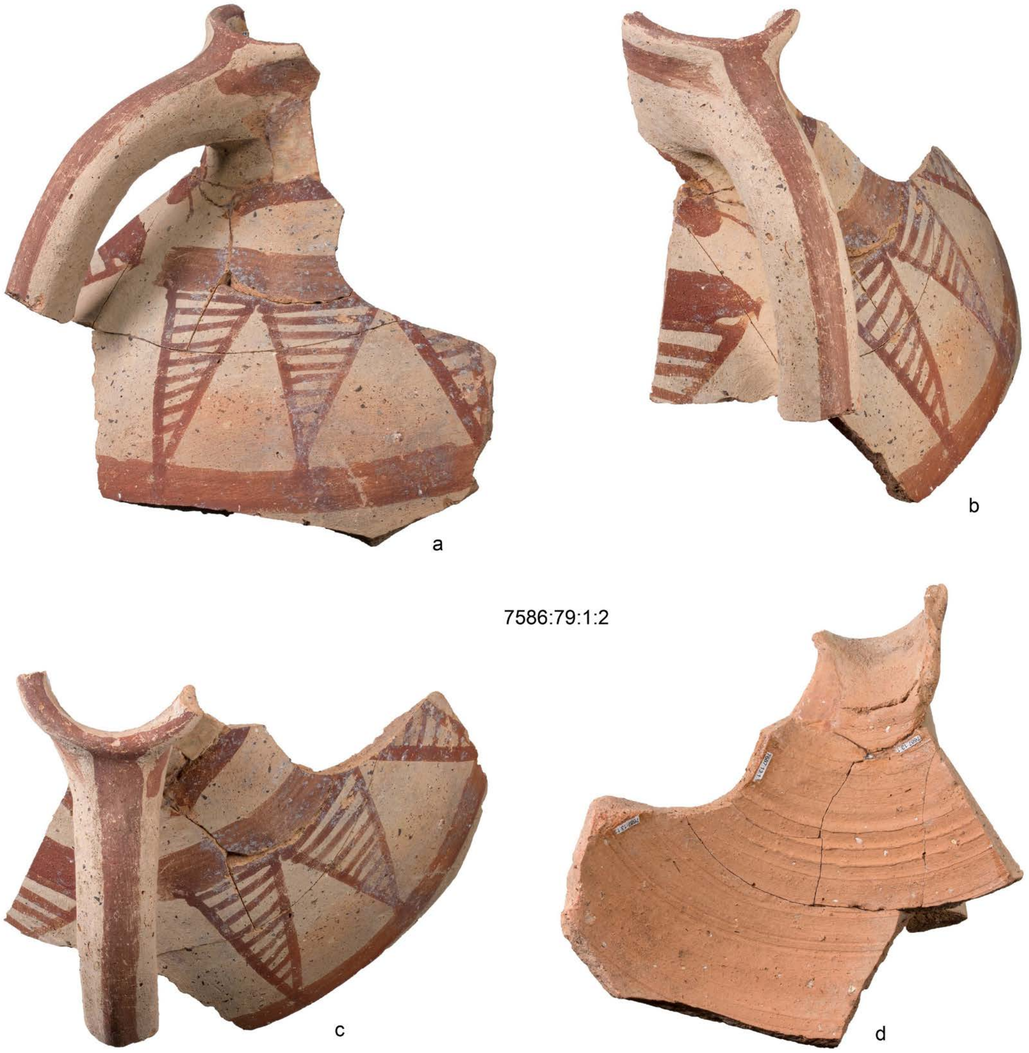

Figure 6: *Jar 7586:79:1:2 of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük: different views without scale (photos: Burak Çümen).*

interval for the firing process between 750 and 850 °C for the painted pottery from Oymaağaç Höyük.[31] It is likely that the pottery was fired in highly developed up-draft pottery kilns similar to the few Hittite examples that have been found.[32] In general, the vessels of the geometric painted pottery group are a little bit harder in texture and more reddish in colour than the contemporaneous Hittite pottery. Nearly all fragments show a carefully prepared surface on the outer side of closed forms and both the inside and outside of open forms. This surface treatment, which seems to have been done in preparation for the painted decoration, consists either of a self-slip or a coating of a light beige, sometimes pinkish colour, which was smoothed or polished and looks dull rather than shiny (**Figures 6, 8**).

At first sight, the painted decoration appears to be in contrast to the careful production and high quality of the pottery itself, because the geometric motifs were applied rather sketchily (**Figures 6, 8**). This is a distinguishing feature of the generally more accurate painted decoration of the Middle and Late Iron Age and gives the geometric painted pottery of the Late Bronze Age a special attraction. The mainly

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[31] Cf. Kibaroğlu *et al.* in this volume.

[32] For Hittite pottery kilns, cf. Mielke 2016c, 164–169.

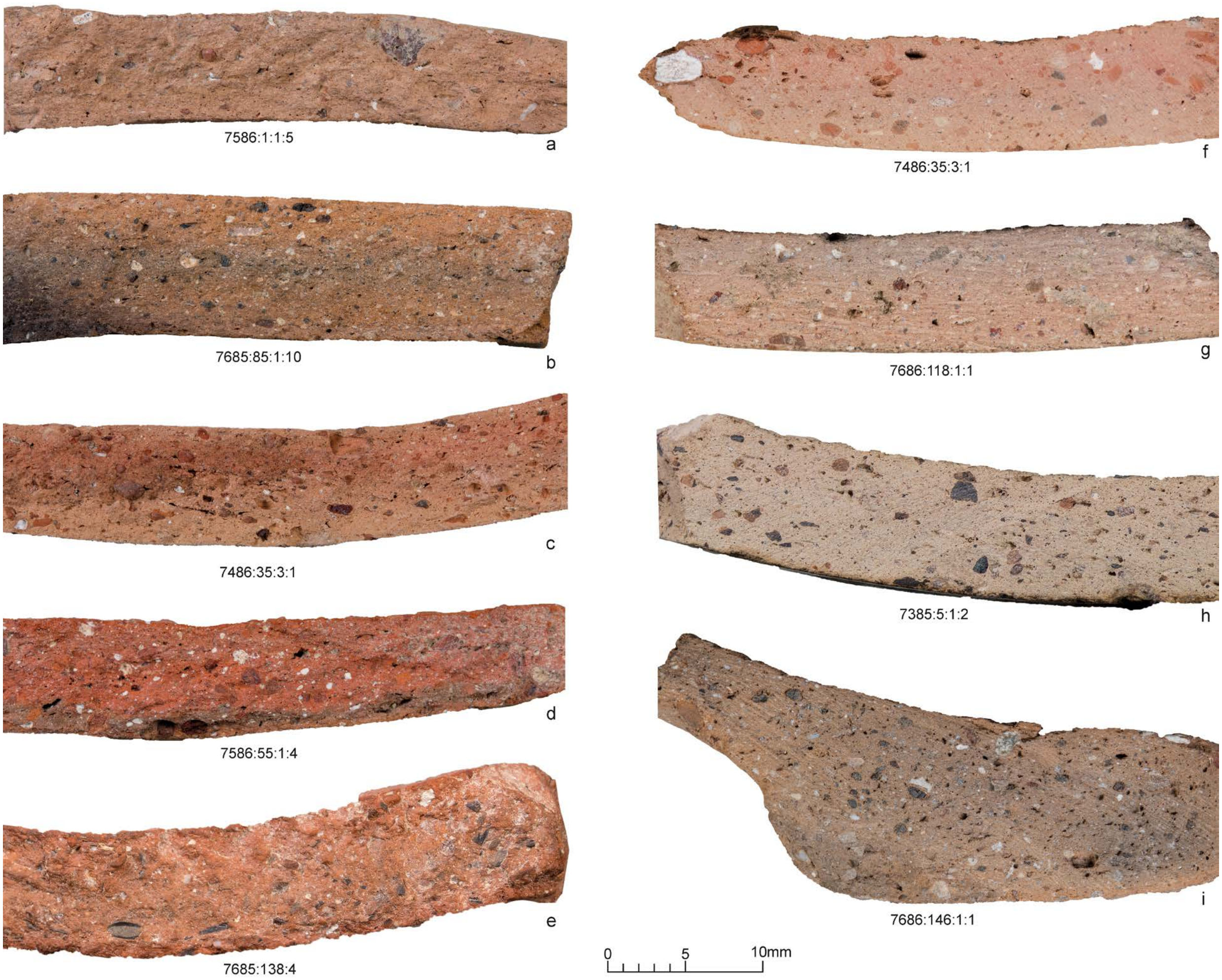

Figure 7: *Broken and polished profile sections of ware samples of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük (photos: Dirk Paul Mielke).*

sketchy and not very accurately painted geometric patterns are of a red, red-brown and sometimes dark-brown colour. Archaeometric analysis of some selected examples, conducted by Mustafa Kibaroğlu and Tillmann Viefhaus, revealed that haematite is one of the main components of the pigment, although the dark-brown examples also show a manganese mineral.[33] All in all, it can be assumed that the pigments for the painted pottery were produced systematically. Significant traces on several pieces show that the paint was applied with brushes (**Figures 6, 8**).

The decoration is provided by the painted motifs themselves and/or the empty space between the painted areas. For the description that follows, we will focus on the painted structures. The main motif found on the vessel fragments consists of triangular patterns between horizontally running lines (**e.g. Figure 8.4, 8.9**). The triangular motifs are usually formed by groups of oblique lines (up to seven lines) or ladder bands (up to three bands), which are arranged in alternating directions. But there are also simple triangles that are either filled completely, with horizontal lines or with cross-hatching (**e.g. Figures 6, 8.7, 8.11, 8.16**). Sometimes there are also lines of dots running alongside the full lines (**Figure 8.8, 8.15**). The triangular motifs may be orientated upwards or downwards. It is likely that the repertoire also includes decorations made up of only horizontal lines (**Figure 9.5**). Despite the limited number of

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[33] Cf. Kibaroğlu *et al.* in this volume.

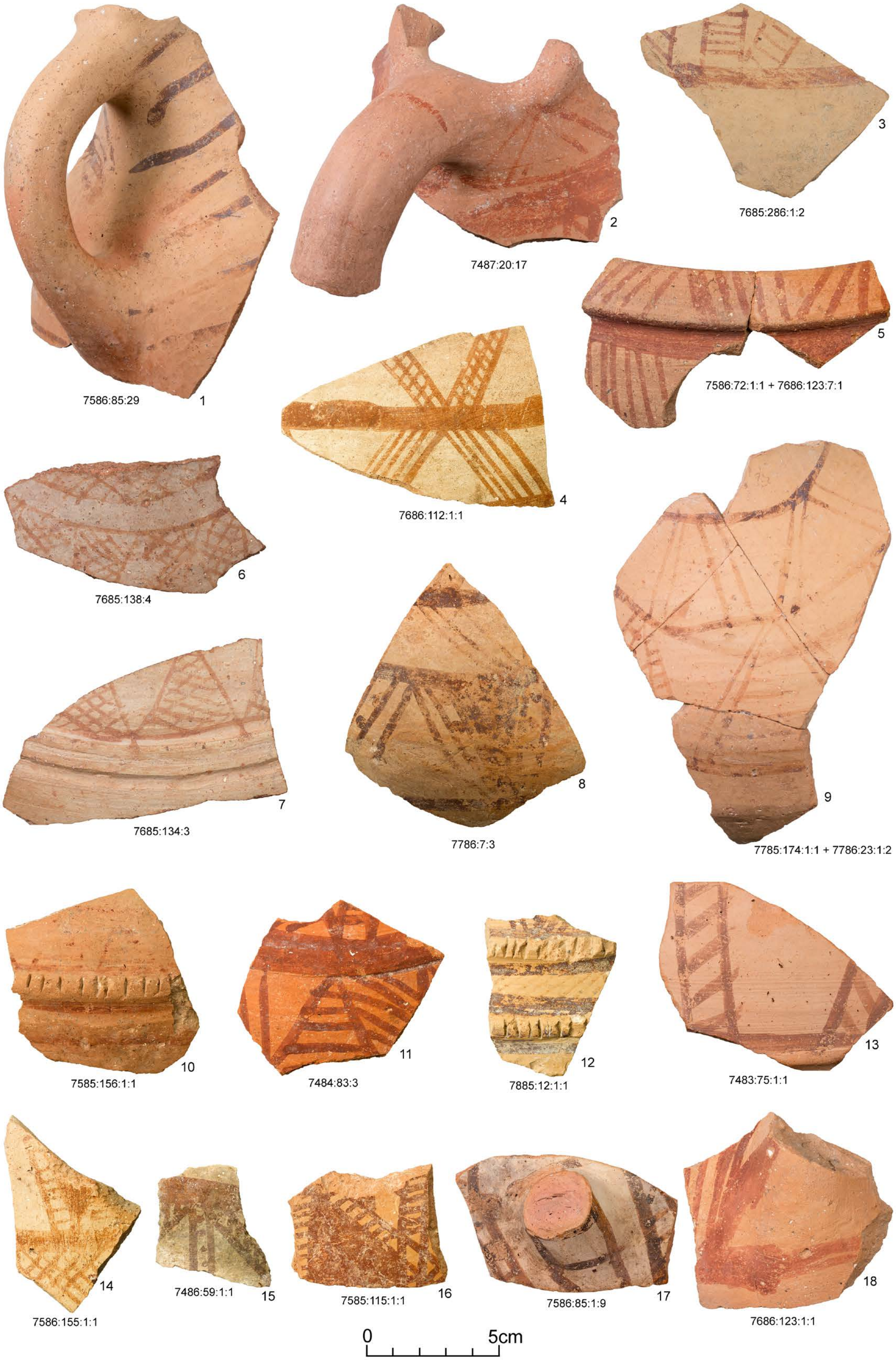
1
7586:85:29
2
7487:20:17
3
7685:286:1:2
4
7686:112:1:1
5
7586:72:1:1 + 7686:123:7:1
6
7685:138:4
7
7685:134:3
8
7786:7:3
9
7785:174:1:1 + 7786:23:1:2
10
7585:156:1:1
11
7484:83:3
12
7885:12:1:1
13
7483:75:1:1
14
7586:155:1:1
15
7486:59:1:1
16
7585:115:1:1
17
7586:85:1:9
18
7686:123:1:1
0
5cm

Figure 8: *Selection of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük with different decorations (photos: Burak Çümen).*

individual geometric motifs, the painting patterns on the single pottery fragments vary greatly. This observation suggests that the vessels were individually painted and that no serial production existed. Furthermore, it seems that there is a connection between the painted sections and the form of the vessel, as it is mostly the upper parts of the vessels, such as the shoulders, mouths, spouts or handles, that are decorated. Only a few fragments of lower vessel parts with painted decoration were found. Very often, the rims or more specifically the lips of the vessels, as the visual and functionally highlighted zone, were decorated with surrounding horizontal lines. Only a small number of pieces in this pottery group are decorated with anything other than these painted designs, such as set offs in the upper part of the vessel wall and, most notably, plastic bands, some of them with vertical incisions (**Figure 8.10–12**). A more detailed analysis of the painting motifs, especially in conjunction with the vessel shapes, is still in progress.

The reconstruction of the vessel repertoire was severely hampered by the high degree of fragmentation (**Figure 4.B**): 81.7% of the 371 painted pottery fragments are body sherds. On the other hand, only 11.3% rim sherds, 0.5 % base fragments and 3.0 % handles as well as 3.5 % fragments with a more complete profile were available as a starting point for the reconstruction of the forms. But a greater number of body sherds could also be assigned to some of the detected vessel shapes, thanks to the frequently occurring wheel marks, which were helpful in terms of orientation as well as in determining the diameter of the vessels and enabling us to create graphic reconstructions of them (**e.g. Figure 9.8–12**). Nevertheless, 66.6% of the painted sherds are indeterminable in relation to their original vessel shape (**Figure 4.C**).

However, in the case of 124 pottery fragments (33.4%) it was possible to assign them to a vessel shape and reconstruct vessel sections as well as, in a few cases, more or less complete profiles of the original shapes by drawing. The spectrum of vessel shapes detected in this way is made up of jugs and jars (it was not always possible to distinguish clearly between jugs and jars, due to the fragmented material), which represent 54% of all the classifiable items and 18.1% of all the painted sherds, bowls (8.9% of the classifiable sherds, 3% of all painted sherds) and pots (37.1% of the classifiable sherds, 12.4% of all painted sherds).

The predominance of the jugs/jars (**Figure 9**) is due to the fact that a large number of body sherds could be assigned to this group; however, it was not possible to make further differentiations. Further classification was only possible in the case of fragments that have preserved rim sections. Thus, some fragments can be clearly classified as jugs, which are basically defined by the fact that they have a spout. Among the material, we found two fragments of spouts that unfortunately have no further preserved parts of the original vessel body. One fragment seems to be part of a channel spout (**Figure 9.3**), whereas the other one belongs to a beak spout. Amongst the other pieces assigned to the jugs a spout is not directly detectable but the rim outlines of several items indicate a spout (**e.g. Figure 9.1–2, 8.2**). In addition to this, jugs generally have a handle that starts right at the rim or goes over the rim, to facilitate pouring. One piece indicates that the jugs had short necks and wide bodies (**Figure 9.2**). Further information about the shapes of the jugs is not available from these few fragments, but the great variety of jugs found in other Anatolian pottery traditions suggests that the same could be true of the Late Bronze Age geometric painted jugs from Oymaağaç Höyük as well.

Although no rim, spout or vertical handle has been preserved, it seems that we also have smaller jugs in the vessel repertoire (**Figure 9.4**). The reconstructed shape of the pieces in question, namely a jug with a flat bottom, bellied body and strongly retracting upper part, is very similar to the small beak-spouted jugs of the Early and Middle Bronze Age in Anatolia and also of the Iron Age, so that we suspect our pieces originally formed a jug of a similar shape.[34] If this assumption is correct, then this form represents

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[34] E.g. Kull 1988, 147 and Taf. 22.2. for the Early and Middle Bronze Age; Genz 2004, 39, Abb. 18 c–d for the Early Iron Age.

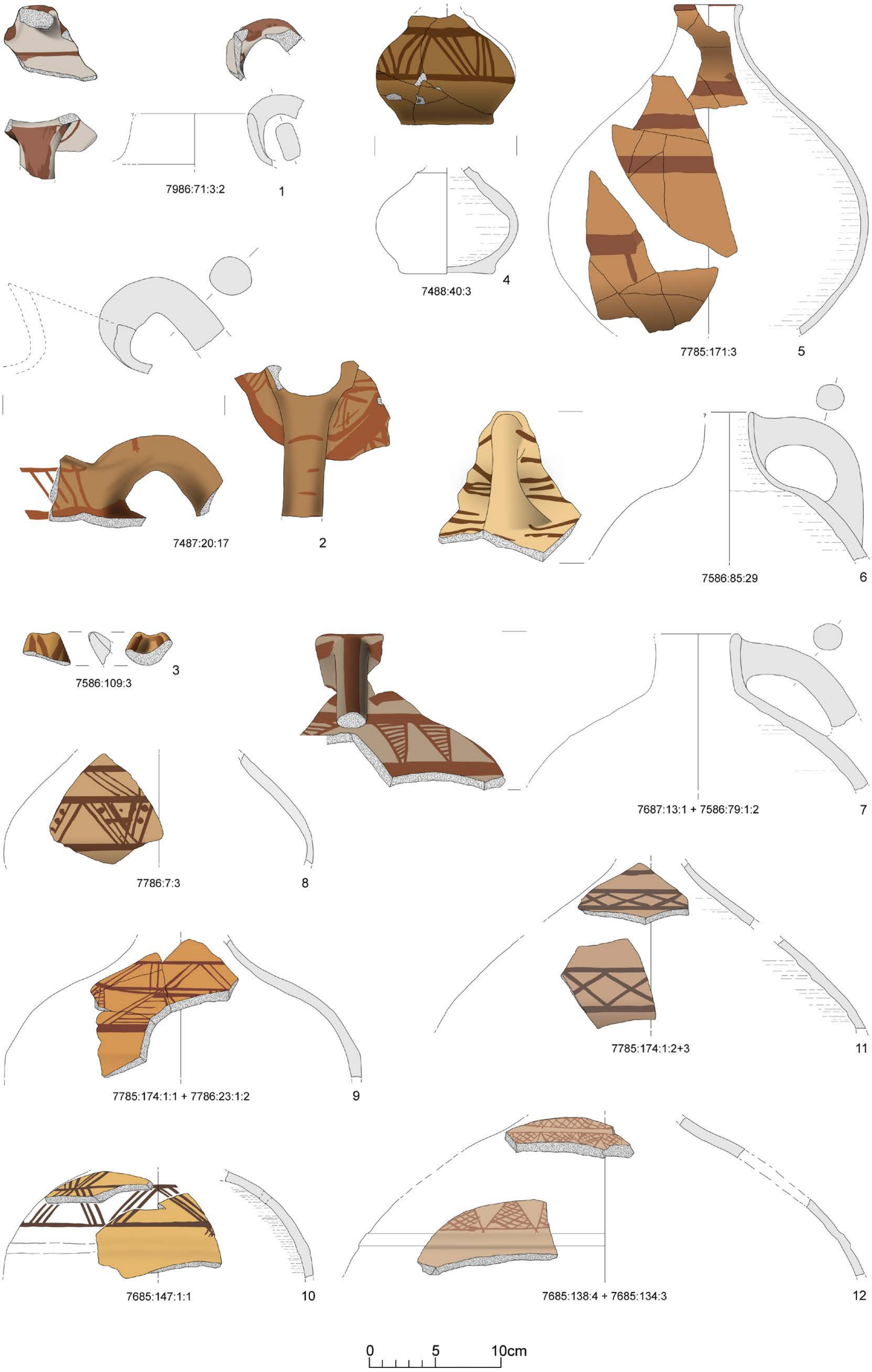
7986:71:3:2
1
7488:40:3
4
7785:171:3
5
7487:20:17
2
7586:85:29
6
7586:109:3
3
7687:13:1 + 7586:79:1:2
7
7786:7:3
8
7785:174:1:2+3
11
7785:174:1:1 + 7786:23:1:2
9
7685:147:1:1
10
7685:138:4 + 7685:134:3
12
0
5
10cm

Figure 9: *Jugs and jars of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük (drawings: Marie Klein).*

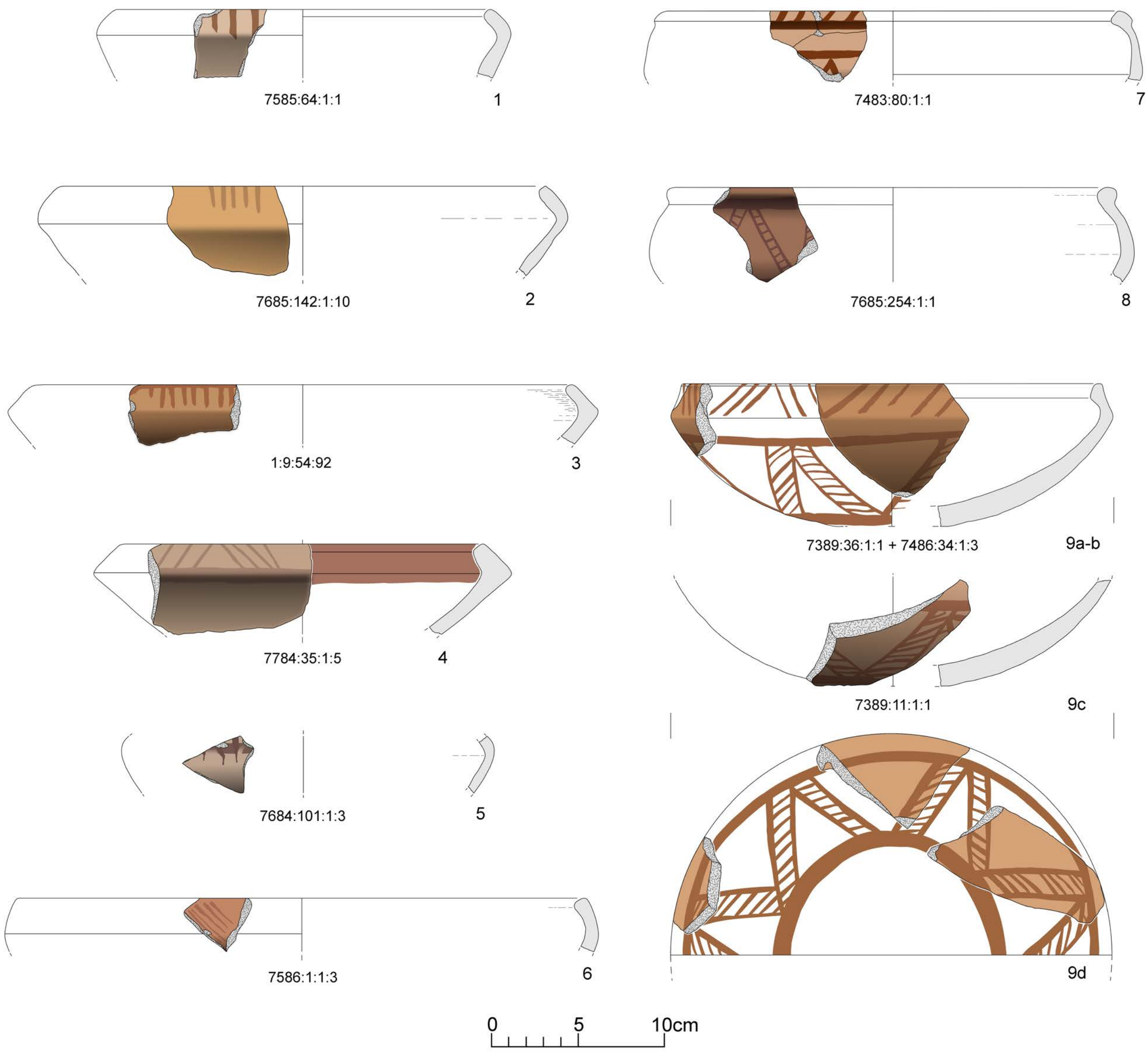

Figure 10: *Bowls of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük (drawings: Marie Klein).*

a continuation of older Anatolian pottery traditions. A further possibility is that these fragments belong to a jar without a spout.

As well as the jugs, jars can also be clearly detected. Jars are defined by the fact that they have no spouts and their handles usually start below the rim, a feature that clearly distinguishes them from jugs. This feature has been demonstrated with several larger specimens (**Figure 9.6–7, 8.1**). As far as ascertainable, the jars of the painted pottery group were generally single-handled. The larger pieces also proved that this shape had a strikingly large, globular body, whereas the neck is set off by a more or less sharp angle. The sometimes very large, globular body seems to be a particular characteristic of this vessel type, additionally demonstrated by numerous reconstructed vessel body parts (**Figure 9.6–12**).

From several fragments that did not all match, it was possible to create a more or less complete vessel profile that fits the shape of these jars (**Figure 9.5**). But the neck is not clearly set off, and no handle attachment was found. This piece also differs from the other jars in terms of how it was painted – its design consists only of horizontal bands. This suggests that perhaps an independent form without a handle – a bottle – existed within the vessel repertoire of the painted pottery group from Oymaağaç Höyük.

Surprisingly, bowls account for the smallest share of the classifiable pieces (**Figure 10**). All the types recorded have in-turning mouths or rims. On the one hand, we were able to detect bellied bowls with short thickened rims and large rim diameters of 26 cm (**Figure 10.7–8**). Parallels to this type, which often show horizontal handles and a red slipped surface, can be found in large quantities from the Middle Bronze Age and the first half of the Late Bronze Age in Central Anatolia.[35] On the other hand, it was possible to determine bowls with high carination whose rims bend inwards at a right angle. These occur in several variants: Variant 1 has a simple elongated rim (**Figure 10.1–3**), whilst variant 2 has a simple thickened rim (**Figure 10.4**). The variants are very similar to one another and strongly reminiscent of bowls from the late Early and Middle Bronze Ages of the so-called painted 'Cappadocian/Alişar III Ware', which, however, also occurred in unpainted examples.[36] The elongated in-turning rims largely disappeared at the beginning of the Late Bronze Age, and our examples seem to represent a surviving older tradition. Thus, it seems that these forms also represent a continuation of older Anatolian pottery traditions. Variant 3 deviates slightly. It has an elongated rim, which is somewhat thickened on the inside and swings outwards at the edge, resulting in a small S-profile. Although only one vessel of this variant has been found so far, both its profile and painted decoration can be fully reconstructed (**Figure 10.9**). For this type, only few comparisons can be quoted from the Anatolian pottery tradition, but it is obvious that we are faced with an older pottery form.[37] One further single fragment demonstrates that in-turning rim bowls with less clearly accentuated rims also existed (**Figure 10.6**). In contrast to the jugs/jars, only a few body sherds can be collated to bowls (**Figure 10.5, 9.c**). This was only possible in exceptional cases, where further information was available.

The last group in the vessel spectrum of the Late Bronze Age painted pottery from Oymaağaç Höyük is made up of pots and seems to show a comparatively wide range of variations (**Figure 11**). Large pots with in-turning upper part and a stepped rim are the most common type of vessel, with the greatest amount of associated rim sherds (**Figure 11.1–5, 8.5**). The diameters of the assigned pieces range from 23 to 37 cm, with an average of 29 cm. However, there are also larger specimens of up to 50 cm in diameter (**Figure 11.2**). Most of these fragments have an elongated, externally thickened rim, which may be rounded or pointed or angular/faceted in shape or shaped with a flat top. There is, however, one specimen that has a short, externally thickened angular rim (**Figure 11.1**). In the case of this type, the walls of the vessel body start directly below the rim and swing immediately outwards in a bellied manner, so that there is no neck. Several body sherds assigned to this vessel type confirm this observation (**Figure 11.6–7**). It is likely that the pots had inclined horizontal handles, as shown by some body sherds with handle attachments, which have matching diameters and shapes to the rim fragments (**Figure 11.13**). Furthermore, we found among the collection of painted pottery two examples of stands or high ring bases, which have diameters of 22 and 26 cm respectively, that only fit with this form (**Figure 11.12**). This is why we believe that they belong to large pots with in-turning upper parts. If the assumption that the rims, the body shards with horizontal handles and the high ring base fragments belong to one vessel shape is correct, then we are dealing with cauldron-like pots. The formal characteristics recorded resemble ceramic forms of the Anatolian and the Aegean Iron Age, which are often denominated as krater or, sometimes, dinos.[38] But similar forms also existed in the Middle Bronze

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[35] Mielke 2006a, 123; Fischer 1963, 67 (so-called 'mehrhenkelige Becken und Schalen').

[36] E.g. Orthmann 1963, Taf. 15–16 (Alişar Höyük) and Öktü 1973, Taf. 8–12 (Kültepe). For the Cappadocian/Alişar III Ware cf. the introduction by Manuelli and Mielke in this volume.

[37] Mielke 2006a, 120 with further references; Orthmann 1963, Taf. 2.1/12 (Kültepe) and Taf. 50.11/116 (Alaca Höyük).

[38] Cf. the definition of Cook 1997, 217 for kraters. Comparable examples are the famous 'Aristonothos Krater' (eg. Schweitzer 1955) or the impressive krater from the Dipylon with the depiction of a ship (Murray 1899). For the classification as dinoi, cf.

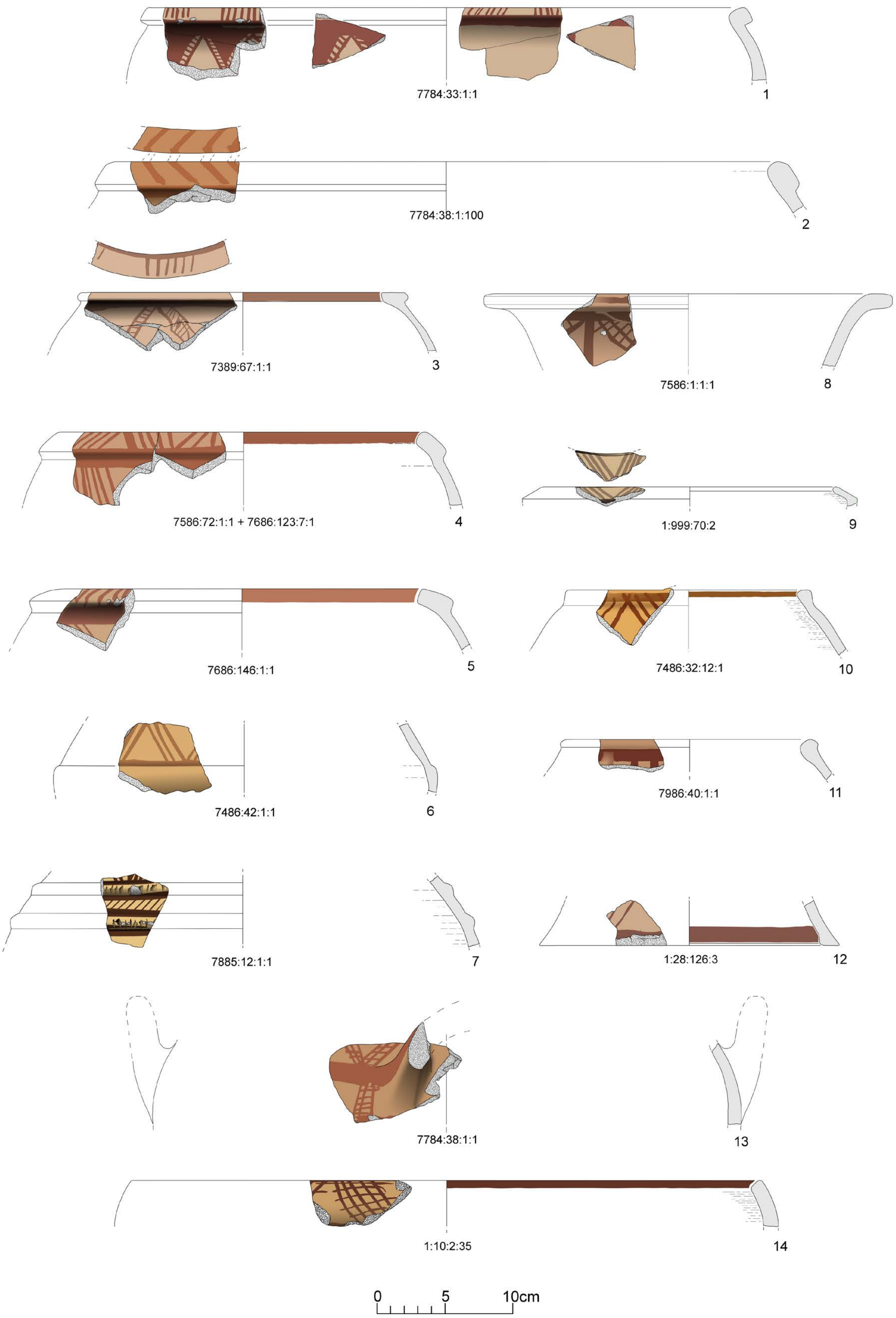
7784:33:1:1
1
7784:38:1:100
2
7389:67:1:1
3
7586:1:1:1
8
7586:72:1:1 + 7686:123:7:1
4
1:999:70:2
9
7686:146:1:1
5
7486:32:12:1
10
7486:42:1:1
6
7986:40:1:1
11
7885:12:1:1
7
1:28:126:3
12
7784:38:1:1
13
1:10:2:35
14
0
5
10cm

Figure 11: *Pots of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük (drawings: Marie Klein).*

Age of Central Anatolia, demonstrated by examples such as those from Maşat Höyük or the Kārum of Kültepe, where copper cauldrons were also found.[39] It is remarkable that we have no comparable forms from the Hittite Late Bronze Age pottery corpus. Given the many pieces of this type among the painted fragments from Oymaağaç Höyük, it is striking that these pots – and possibly also the other forms – obviously had specific painting patterns adapted to the vessel body (**Figure 11**). For example, the large pots with in-turning upper part and stepped rims always have a horizontal line running around the inside of the rim. On the upside of the rim, groups of inclined setted lines were placed. Under the rim a further horizontal and usually broad line is painted, below which follows the basic design of triangular patterns consisting of inclined setted lines or ladder bands.

Apart from these large cauldron-like vessels, small pots with an in-turning upper part and a slightly thickened rim on the outside can be identified as an independent type (**Figure 11.10–11**), although only two fragments could be assigned. The diameters of the mouths are 18 and 19 cm respectively. However, we must take into account that other shapes, such as handled jars or cups, may also be hiding among these fragments. Comparisons to this simple form can be found from many periods and regions of Anatolia.[40]

In contrast to all vessel forms of the geometric painted pottery discussed so far, which, except for some general characteristics, have no similarities with the contemporary Hittite pottery forms, the reconstructed shapes of two rim fragments from the painted material (**Figure 11.8**) show a clear resemblance with Hittite funnel rim pots. It is also striking that they lack the angular rim designs typical of the other painted pots.[41] With this observation in mind, it can be assumed that here we are probably dealing with the adoption of a Hittite ceramic form into the spectrum of the geometric painted pottery. This is of greater importance because the funnel rim pots had a special function in the Hittite pottery corpus and the very few examples of painted Hittite pottery belong to this type.[42] A few single pieces indicate that there were further vessel types within this group of pots. Thus, we were able to identify small pots with elongated in-turning rim (**Figure 11.9**), pots with carinated walls and large pots with in-turning upper parts and simple rims (**Figure 11.14**). Some very thick-walled body sherds also suggest that large pots made up of several wheel-made parts may have existed. Body sherds could only be assigned to pots in a few cases (**Figure 11.6–7, 11.13**), and it was only possible to make a rough distinction between large and small pots. As mentioned before, the bulk of the 247 painted body sherds (66.6%) could not be assigned to any shape (**Figure 4.C**).

Except for the stands, or high ring bases, assigned to the large pots mentioned above, no bases have been identified so far, which is probably due to the fact that, in most cases, they were unlikely to have been painted. The only exception here is the almost completely reconstructed in-turning rim bowl (**Figure 10.9**). So far, the painted handles have been generally assigned to the jugs/jars if they are vertical handles, or to the large pots if they are horizontal handles. But it seems that larger pots were also equipped with two opposite attached vertical handles.

For a final characterisation, it should be noted first that the typological classification presented here is based on vessel fragments and that – apart from one bowl – not a single vessel profile is complete. Nevertheless, we are convinced that the original spectrum of vessel shapes can be confirmed on its basic vessel types, namely jug/jars, bowls and pots. It is striking that the painted Late Bronze Age pottery

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Bossert 2000, 52–71. For the Early Iron Age, cf. Genz 2004, 20 (classified as 'halslose Töpfe', especially Type C6).

[39] Maşat Höyük: Özgüç 1982, Fig. 80 (without any description in the text). Kültepe: Özgüç 1950, Fig. 266 (pottery) and Özgüç 2003, 242, Fig. 252 (copper).

[40] E.g. Mielke 2006a, 101 with further references.

[41] For the Hittite funnel rim pots, cf. Mielke 2006a, 96–99 with further references.

[42] Cf. Manuelli and Mielke in this volume.

clearly reflects a limited range of vessels. For example, no painted storage or cooking vessels were found. From the information and clues at hand, we can surmise that we are dealing here with various types of serving or dining vessels, which may have been used for feasting activities, something that is well known from other cultures.[43] The statistical distribution of the different forms (**Figure 4.C**) is, however, only of limited value, due to the small number of classifiable sherds and the different degrees of classification for each shape. In addition, we must assume that the corpus of the painted pottery contains several hundred years of typological development, which we cannot yet grasp in any way. But as well as the pottery's specific painted designs, the reconstructed shapes and types also represent a unique and autonomous spectrum of vessels that is clearly different from the contemporaneous Hittite pottery. The fact that the painted pottery discovered at the site of Oymaağaç Höyük includes a diverse range of individual vessels and decorations and that it cannot be attributed to any known pottery group indicates that it very likely reflects a local or regional phenomenon. This assumption is confirmed by the archaeometric analyses, which show that the painted pottery from Oymaağaç Höyük differs from the Hittite one but is nevertheless closely related and must be produced in the region.[44] All in all, it seems that the Late Bronze Age geometric painted pottery represents an independent pottery tradition from the Central Black Sea region in the 2nd millennium BC. For the evaluation of this previously unknown pottery tradition, it is noteworthy that whilst, on the one hand, some obviously older Anatolian pottery traditions can be recognised (due to some of the vessel forms), on the other hand, a number of typological Iron Age features, notably the angular rim profiles, are also already recognisable. In the case of the funnel rim pots, cultural interactions with the Hittite pottery tradition may also be grasped.

Comparable findings

After this short presentation of the newly discovered Late Bronze Age geometric painted pottery from Oymaağaç Höyük, the question arises as to whether there are comparable findings from other excavations in the wider region, i.e. the Central Black Sea region and North-Central Anatolia. The evidence is limited, since no further excavations in the wider vicinity of Oymaağaç Höyük were conducted. But in the surrounding regions, some few but interesting Late Bronze Age comparisons can be quoted.

The first site that should be mentioned is Oluz Höyük, which lies 75 km south of Oymaağaç Höyük, in the province of Amasya. Here, in a Late Bronze Age layer (7B architectural layer), Şevket Dönmez's excavation team found – at the same time that the Oymaağaç findings came to light – several pieces of pottery that had also been painted red and made on a potter's wheel.[45] As can be seen in a published photo (**Figure 12.1**), the fragments that have been found to date clearly belong to one vessel, which seems to be a large pot. Decorated with a geometric pattern placed between horizontal lines on a prepared beige surface, this piece is very similar to the painted pottery from Oymaağaç Höyük. The sketchy style of painting, which is most clearly observable on the crosswise and diagonally painted handles, has clear parallels with our material. However, the comparatively broad application of painted lines is striking, but this is probably due to the size of the vessel. The layer, in which typical Hittite pottery was also found, is dated back to the late 13th and the early 12th century BC, however, this estimation was made based only on general considerations.[46]

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[43] E.g. Bray 2003; O'Connor 2015.

[44] Cf. Kibaroğlu *et al.* in this volume.

[45] Dönmez and Abazoğlu 2019, 239–240 with Fig. 3–6. For a general overview of the site, cf. Dönmez 2010. I would like to thank Prof. Şevket Dönmez for the discussion and additional information about the ceramic finds from Oluz Höyük.

[46] Dönmez and Abazoğlu 2019, 239. The contemporaneous Hittite pottery published in Fig. 2 of this article did not support this assumption, since it seems not to belong to the latest Empire period pottery. However, it must be considered that an evaluation only made on the basis of a collection photo is extremely difficult.

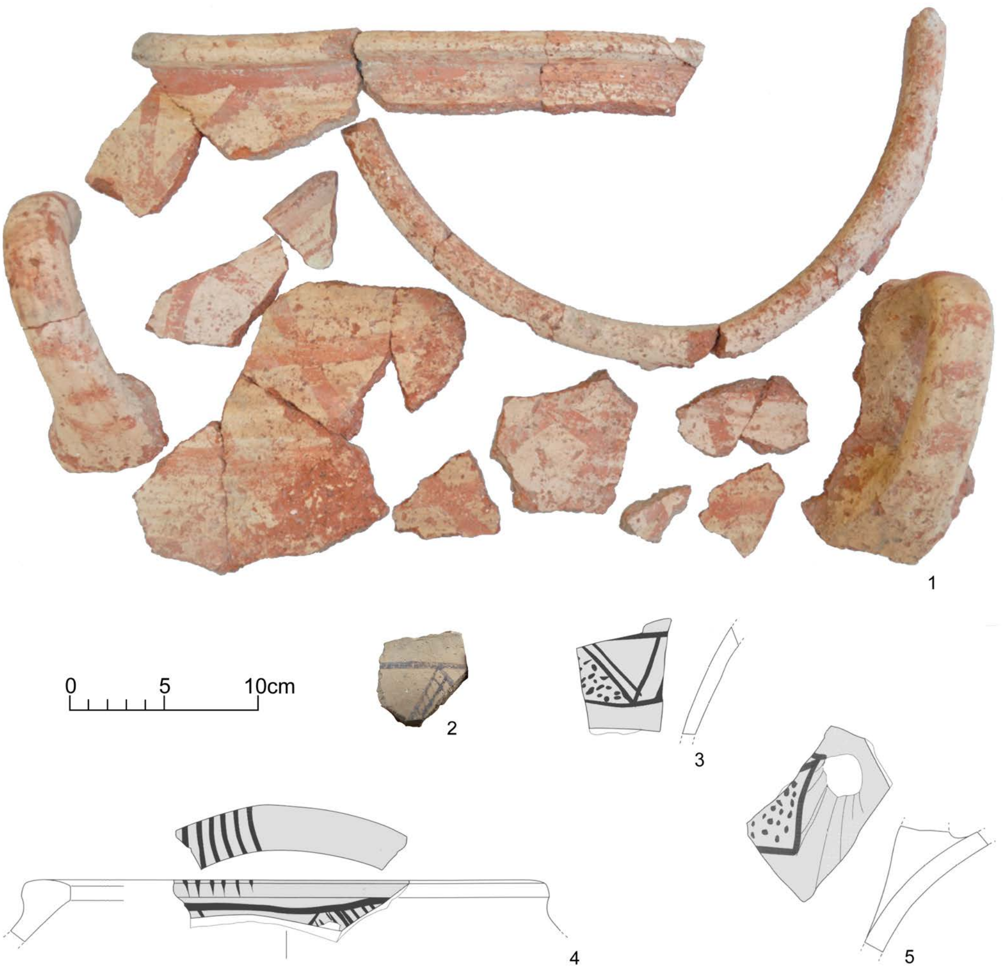

Figure 12: *Late Bronze Age wheel-made geometric painted pottery from North-Central Anatolia and the Central Black Sea region: 1) Oluz Höyük, excavation find (after Dönmez and Abazoğlu 2019, Fig. 5); 2) Köprübaşı-Tepeören/Vezirköprü, survey find (photo: D.P. Mielke); 3) Küçük Küllük/Merzifon, survey find (after Özsait and Özsait 2002, Pl. II.4); 4) Küçük Küllük/Merzifon, survey find (after Özsait and Özsait 2002, Pl. II.1); 5) Yeniköy-Ada/Hamamözü, survey find (after Özsait and Özsait 2002, Pl. VI.4).*

Furthermore, from Maşat Höyük, the Hittite 'border town' of Tappiga, 120 km south-south-east of Oymaağaç Höyük (Tokat province), a broken but complete wheel-made beak-spouted jug painted with red geometric patterns shows similarities with our pottery group.[47] Between three horizontal lines on the neck and shoulder of the 29-cm-tall vessel, two zones are decorated with triangular motifs (**Figure 13.4**). In the second publication of the findings from Maşat Höyük from 1982, written by Tahsin Özgüç, the piece is described as a 'pale red slipped beaked pitcher with painted design of thick red stripes on the shoulder', but it is obvious that this vessel had no red slip but rather a polished surface.[48] This piece comes from Hittite level I, about which little information is available but from which some of the Mycenaean vessels originate, which are extremely rare in Hittite Anatolia. Generally, this layer is dated to the 13th century BC. Although beak-spouted jugs are considered typical of Hittite pottery, they

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[47] Mşt. 74/20. Özgüç 1978, 124, Pl. 48.3; 1982, 30 (Turkish), 102 (English), Fig. 34. For the site, cf. the overview of Mielke 2011, 1045–1047; 2013, 208–214.

[48] I would like to express my deep gratitude to Dr. Filiz Divarcı for giving me more detailed information about this vessel and especially for providing new colour photos.

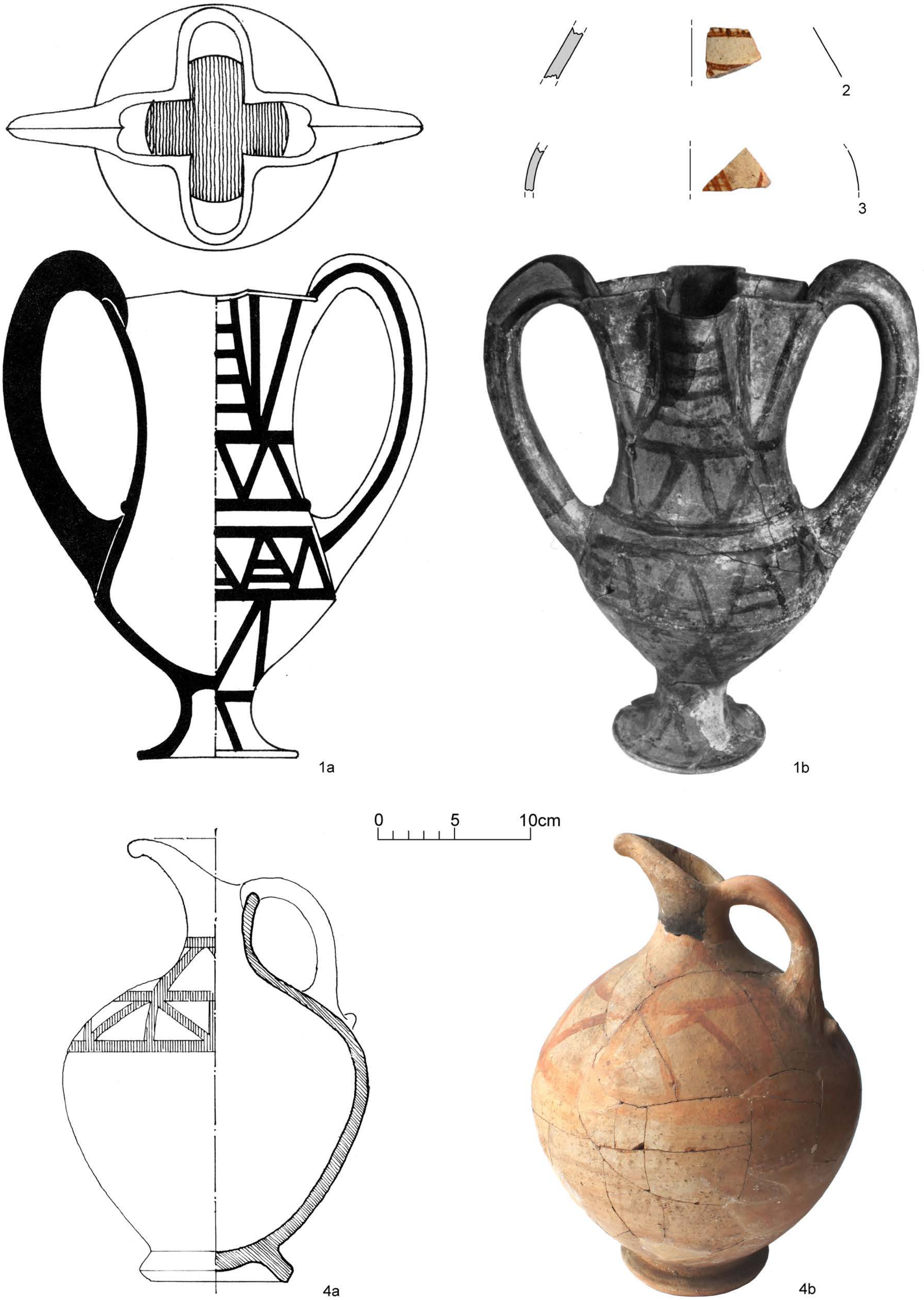

Figure 13: *Late Bronze Age wheel-made geometric painted pottery from North-Central Anatolia and the Central Black Sea region: 1) İnandıktepe, excavation find (after Özgüç 1988 Fig. 31, Pl. 29.3); 2–3) İnandıktepe, finds from the Paphlagonia survey (site PS 170), (re-drawn with inserted photo by the author after Matthews 2009, Fig. 5.16.6–7); 4) Maşat Höyük (Mşt. 74/20), excavation find (drawing after Özgüç 1982, Fig. 34, photo: Filiz Divarcı).*

represent an Anatolian vessel form with a long tradition.[49] The comparatively simple geometric design shows strong similarities to several painted vessels from the Middle Bronze Age/Kārum period layer V of Maşat Höyük.[50] Few parallels for this kind of decoration are known from Kültepe, Alişar Höyük and Boğazköy.[51] According to Filiz Divarcı, who re-evaluated the Hittite findings from Maşat Höyük in her doctoral thesis, the vessels from these two periods are connected and represent a local tradition.[52]

Another piece comparable to our geometric painted Late Bronze Age pottery comes from İnandıktepe (Çankırı province), 185 km south-west of Oymaağaç Höyük. The 33.4-cm-tall vessel, described as 'buff slipped and polished' is completely preserved and its entire exterior is painted in a red geometric design (**Figure 13.1**).[53] With its two overhanging loop handles and double cloverleaf-shaped spout, it belongs to a group of vessels called 'Kantharoi' in Anatolian archaeology.[54] The painted decoration is made up of various triangular motifs placed between several horizontal stripes, a design that can easily be compared with that of the pottery of Oymaağaç Höyük, especially because of the equally light and sketchy paint application. The vessel comes from one of the storerooms of the country estate of İnandıktepe.[55] However, more detailed information on the find context is not available.[56] By comparing the pottery inventory of İnandıktepe with finds and features from Kuşaklı-Šarišša, we can date these findings back to the last quarter of the 16th century BC.[57] As Tahsin Özgüç has already stated, this vessel is a unique piece, but it is not the only pottery specimen from İnandıktepe that can be connected with the geometric painted pottery from Oymaağaç Höyük. During the Paphlagonia Survey of 1997–2001, carried out under the direction of Roger Matthews, the site of İnandıktepe was investigated again, and several sherds were collected.[58] Apart from a large number of plain Late Bronze Age samples, two sherds with light beige slips and painted geometric motifs in a red-brown colour were also found (**Figure 13.2–3**). However, in the publication of the survey findings, they were classified as Early Iron Age because of their similarity to findings from the Büyükkaya excavations in Boğazköy (see below).[59] This is not surprising because of the state of research in those days and because of the fact that, during the excavations of 1966 and 1967, few traces of an Iron Age occupation in İnandıktepe were identified (building level II).[60] After a new inspection, it was evident that both fragments are extremely similar to the group of geometric painted pottery from Oymaağaç Höyük.[61] Furthermore, it is noteworthy that these two sherds are described in the publication as wheel-made.[62] Therefore they fit better with the newly discovered Late Bronze Age pottery from Oymaağaç than with the handmade Early Iron Age examples from Boğazköy. Thanks to their graphic reconstruction, they can be classified as jugs/jars. Thus, for the time being, the country estate of İnandıktepe exhibits the most important comparative examples to the geometric painted pottery from Oymaağaç Höyük.

Several fragments of geometric painted pottery were also found and documented from the Hittite capital of Boğazköy-Ḫattuša (Çorum province), 150 km south-south-west of Oymaağaç that might also be

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[49] Fischer 1963, 36–41; Özgüç 1988, 78; Mielke 2006a, 46–48.

[50] Özgüç 1982, Pl. 51.1–2, Fig. 64, 68–71, 75 and 80.

[51] Cf. Manuelli and Mielke in this volume, Fig. 5 and with further references.

[52] Divarcı 2019.

[53] Özgüç 1988, 12–13, 62 (Turkish), 80–81, 130 (English) with Fig. 31 and Pl. 29.3.

[54] Fischer 1963, 70–71 (No. 1067–1070); Bittel 1937a, 47–48; Özgüç 1988, 13, 81.

[55] For a new evaluation and interpretation of the findings from İnandıktepe, cf. Mielke 2006b, 253–264.

[56] In particular, the information on the findspot differs in the Turkish (Room 3) and English (Room 2) versions of the text.

[57] Mielke 2006b, 270–272.

[58] Glatz *et al.* 2009, 113 (site PS170).

[59] Matthews 2009, 152, Tab. 5.3 and Fig. 5.16.6–7; cf. also Seeher 2010, 224.

[60] Özgüç 1988, 1 (Turkish), 69 (English).

[61] The new inspection was possible thanks to a colour photo of the pieces, which Prof. Roger Matthews kindly sent to me, for which I would like to thank him deeply.

[62] Matthews 2009, 167, table (catalogue) Fig. 5.16.

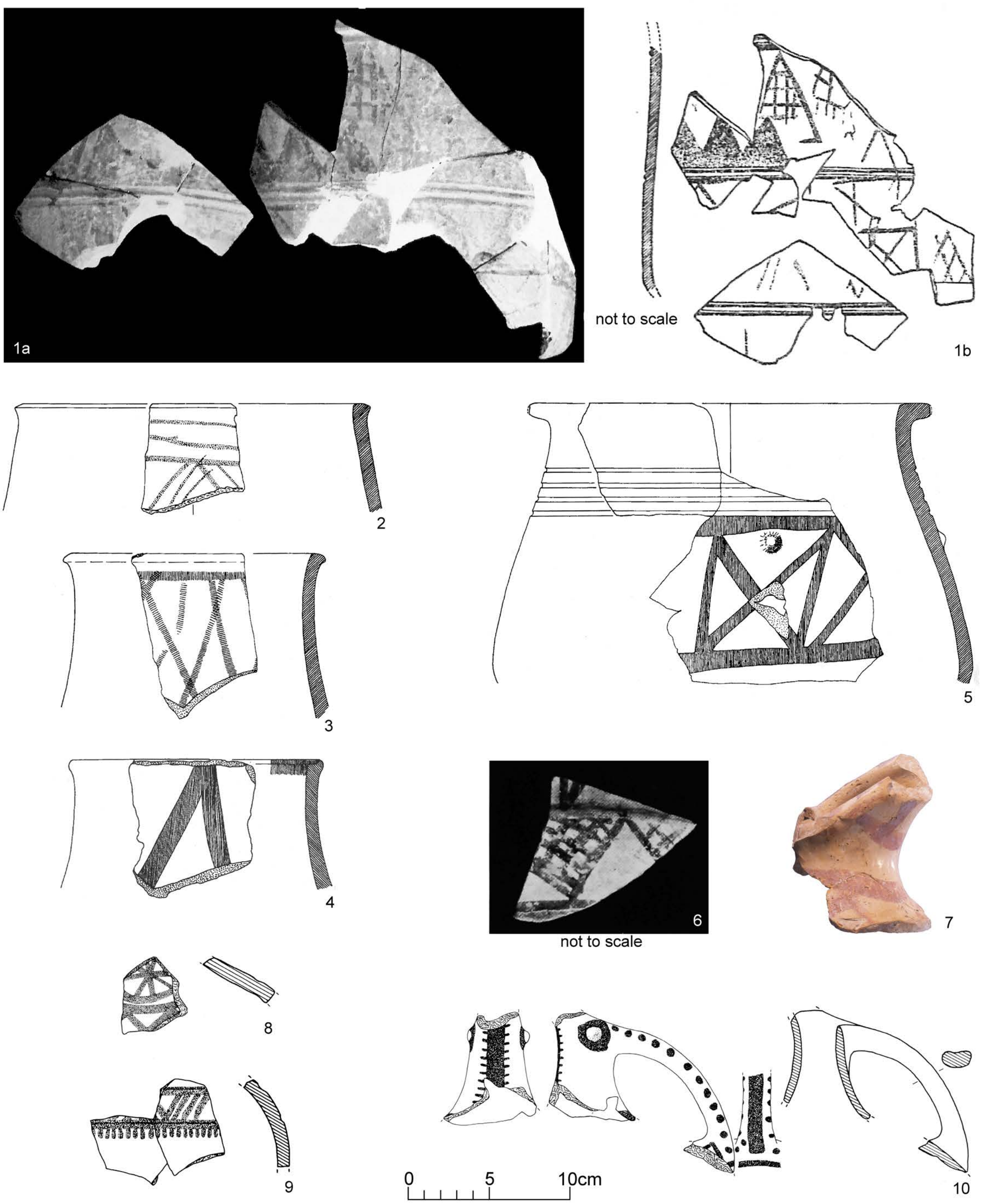

Figure 14: *Late Bronze Age wheel-made geometric painted pottery from Boğazköy: 1) Boğazköy-Osmankayası, excavation find (after Bittel et al. 1958, Abb. 8.14, Taf. 22.4); 2–6) Boğazköy-Büyükkale, excavation finds (No. 6 is handmade) (after Fischer 1963, no. 156 [Taf. 14], 170–171 [Taf. 16], 214 [Taf. 17], 196 [Taf. 20]); 7) Boğazköy-Büyükkaya, excavation find, Late Bronze Age (photo: Jürgen Seeher); 8) Boğazköy-Büyükkaya, excavation find, unstratified (after Genz 2004, Taf. 36.11); 9) Boğazköy-Büyükkaya, excavation find, Early Iron Age (after Genz 2004, Taf. 4.13); 10) Boğazköy-Büyükkaya, excavation find, unstratified (after Genz 2004, Taf. 35.10).*

connected to the Late Bronze Age geometric painted pottery (**Figure 14**). But the situation in Boğazköy is a little confusing: in 1937, Kurt Bittel presented a first, extremely limited overview of the few pieces of painted pottery from the excavations of 1931 onwards in which he dated some pieces to the Late Bronze Age and shared his opinion that they were clearly Hittite in origin.[63] The first larger amount of pottery painted with a red geometric decoration came from the excavations at Büyükkale, conducted between 1952 and 1965. The pottery from these excavations was partly published in the volume by Franz Fischer and consists of handmade and wheel-made pottery dated by the excavators to the Hittite period, which also includes the Kārum period.[64] Fischer's summary covers several different groups of painted pottery and leaves many questions unanswered, particularly in regard to the exact stratigraphic position of the finds.

The next assemblage of geometric painted pottery came to light during the excavations of 1982 and 1983 in Temple 7 of the Upper City and were published by Hermann Parzinger and Rosa Sanz.[65] The pieces were connected to the 'Oberstadt 2' period, which, at that time, was dated to the Late Empire period or, more specifically, the 13th century BC, but surprisingly, all sherds were handmade. A connection to Early Iron Age pottery was discussed, but dating these finds to the Late Bronze Age was not questioned.[66] A change in the assessment of the red-painted geometric pottery from Boğazköy occurred when excavations were carried out on Büyükkaya from 1993 to 1998, under the direction of Jürgen Seeher.[67] Thanks to a good stratigraphic excavation and systematic absolute dating, carried out using radiocarbon samples, it became clear that the handmade pieces of red-painted pottery must date back to the middle and late phases of the Early Iron Age (12th–10th century BC).[68] The results of this excavation and the publication of the pottery by Hermann Genz led to a revaluation of the findings from Büyükkale and Temple 7 and also affected the dating of similar findings from other sites in Central Anatolia (see below).[69] From then on, it has been widely accepted in the world of Anatolian archaeology that the handmade pottery made of reddish-brown clay with a smoothed or polished surface, dull red painting and faceted rims and handles was to be regarded as a phenomenon of the Early Iron Age of North-Central Anatolia. After this change in research history, it even seemed likely that there had never been any red-painted pottery from the Late Bronze Age in Central Anatolia.

It was surprisingly hidden in this new research that among the published material from Boğazköy-Büyükkale, there were indeed some red-painted pieces with geometric motifs similar to the other findings but produced on a potter's wheel. With the exception of some sherds which, due to their shape and painting style, can be connected to the Hittite pottery repertoire,[70] several fragments with 'dull red painting' remain as possible parallels to our finding (**Figure 14.2–5**).[71] It is noticeable that the majority of these pieces obviously come from larger pots, which, as far as we could tell by analysing the few preserved rims, have no direct comparisons in the spectrum of geometric painted pottery vessels from Oymaağaç Höyük. However, they mostly have simple rim profiles, meaning that this aspect should not be overestimated. The obvious connections are the sketchy painting style and the dull paint used for the geometric motifs. But since these findings are only presented in the form of simplified drawings, and no photos are available, carrying out an accurate evaluation is very difficult. Furthermore, the wheel-made, red-painted pottery from Büyükkale still poses a problem in terms of its stratigraphic allocation. Therefore, a connection with the painted pottery from Oymaağaç Höyük must remain vague.

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[63] Bittel 1937b, 38–40.

[64] Fischer 1963, 32–34, Taf. 13–20, 30 (Nr. 255). It is important to note that Fischer's work includes only the findings up to the end of 1960, so that not all of the painted pieces found on Büyükkale were described in the publication.

[65] Parzinger and Sanz 1992, 33–36 (forms), 39 (wares), 66–68 (interpretation), Taf. 7, no. 9, 11, 13, 16 and Taf. 8, no. 13, 18–24 and Abb. 42 (mapping).

[66] Parzinger 1995.

[67] Seeher 2018.

[68] Genz 2004; 2003a; 2000.

[69] Genz 2000; 2001; 2003a; 2003b.

[70] Cf. Manuelli and Mielke in this volume, Fig. 7.3–5.

[71] Fischer 1963, no. 164 (Taf. 15), 170–171, 173, 175, 177–181 (Taf. 16), 186 (Taf. 17), 214 (Taf. 17) and maybe 156 (Taf. 14), but no information about the particular manufacturing method of this piece was provided. For the Hittite painted pottery, cf. Manuelli and Mielke in this volume.

But from the small burial ground of Osmankayası in the immediate vicinity of Boğazköy, some red-painted and wheel-made body sherds were published that match the Late Bronze Age painted pottery group of Oymaağaç Höyük (**Figure 14.1**).[72] The pieces clearly all belong to one large wheel-made vessel, which was decorated with a pattern of filled and cross-hatched triangles between horizontal lines. These small lines are additionally accentuated by horizontal grooves. But it must be pointed out that, from the published photo and especially from the drawing, the exact geometric pattern is not entirely clear. Nevertheless, the similarity with the painted pottery group of Oymaağaç Höyük is evident. Unfortunately, this comparison is a stray find and cannot be connected with one of the graves. Kurt Bittel mentioned in the publication that this piece is the same kind of ware as a red-painted and handmade fragment found during the excavations at Büyükkale (**Figure 14.6**).[73] Concerning the stratigraphic information, which is of course problematic, this piece must be older than the Büyükkale III period which is connected with the Empire period. Interestingly, this fragment – probably a bowl – was not classified by Hermann Genz in his re-evaluation of the old finds as being from the Early Iron Age.[74] Like the find from Osmankayası, this sherd, with its geometric pattern of cross-hatched triangles between horizontal lines, shows a striking similarity to the Oymaağaç Höyük painted pottery. This is also the case for some fragments of a beak spouted jug found in the debris of the Büyükkale III period.[75] But the vessel, which obviously was decorated with geometric red colour painted motifs, was described as handmade. In the publication of Osmankayası another red-painted rim fragment with knobs on the shoulder might also be connected with our pottery.[76] But this is also a stray find, and no further information about the piece was provided. Another unpublished piece, which is very similar to our jug (**Figure 9.2**), comes from the excavations at Büyükkaya (**Figure 14.7**) and has a clear Late Bronze Age context.[77]

Finally, also during the excavations at Ortaköy-Šapinuwa few pieces of Late Bronze Age geometric painted pottery came to light.[78]

Only these few comparisons from other excavations may be considered parallels to the painted pottery group from Oymaağaç Höyük. It is remarkable that the pieces from Oluz Höyük, Ortaköy and İnandıktepe, as well as the one from Maşat Höyük, come from sites that are located in the more northern parts of the core Hittite area, and that south of Boğazköy no comparable finds are attested (**Figure 16**). But the question is, can we consider these comparable pieces, along with the finds from Oymaağaç Höyük, to be examples of a common Bronze Age Central Black Sea/North-Central Anatolian painted pottery tradition? Although the aforementioned comparisons from Oluz Höyük, Maşat Höyük, İnandıktepe and Osmankayası show striking similarities to the Oymaağaç Höyük group, this question will only be able to be answered conclusively after a close inspection of the original finds, ideally in combination with archaeometric analyses. With the current state of research, we can only assume an affiliation between the pieces and open the matter up for further discussion.

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[72] Bittel *et al.* 1958, 17–18 with Abb. 8.14, Taf. 22.4.

[73] Bittel *et al.* 1958, 18. This piece was first published by Bittel 1937b, Abb. 18D and once again by Fischer 1963, no. 196 (Taf. 20).

[74] Genz 2003b.

[75] Fischer 1963, Taf. 30 (Nr. 255).

[76] Bittel *et al.* 1958, 21 with Abb. 11.7.

[77] Jürgen Seeher kindly gave me the information and a photo of this piece, for which I am very grateful. A publication of this fragment by Jürgen Seeher is in preparation.

[78] I would like to thank Prof. Aygül Süel and Prof. Önder İpek for the opportunity to study the unpublished material.

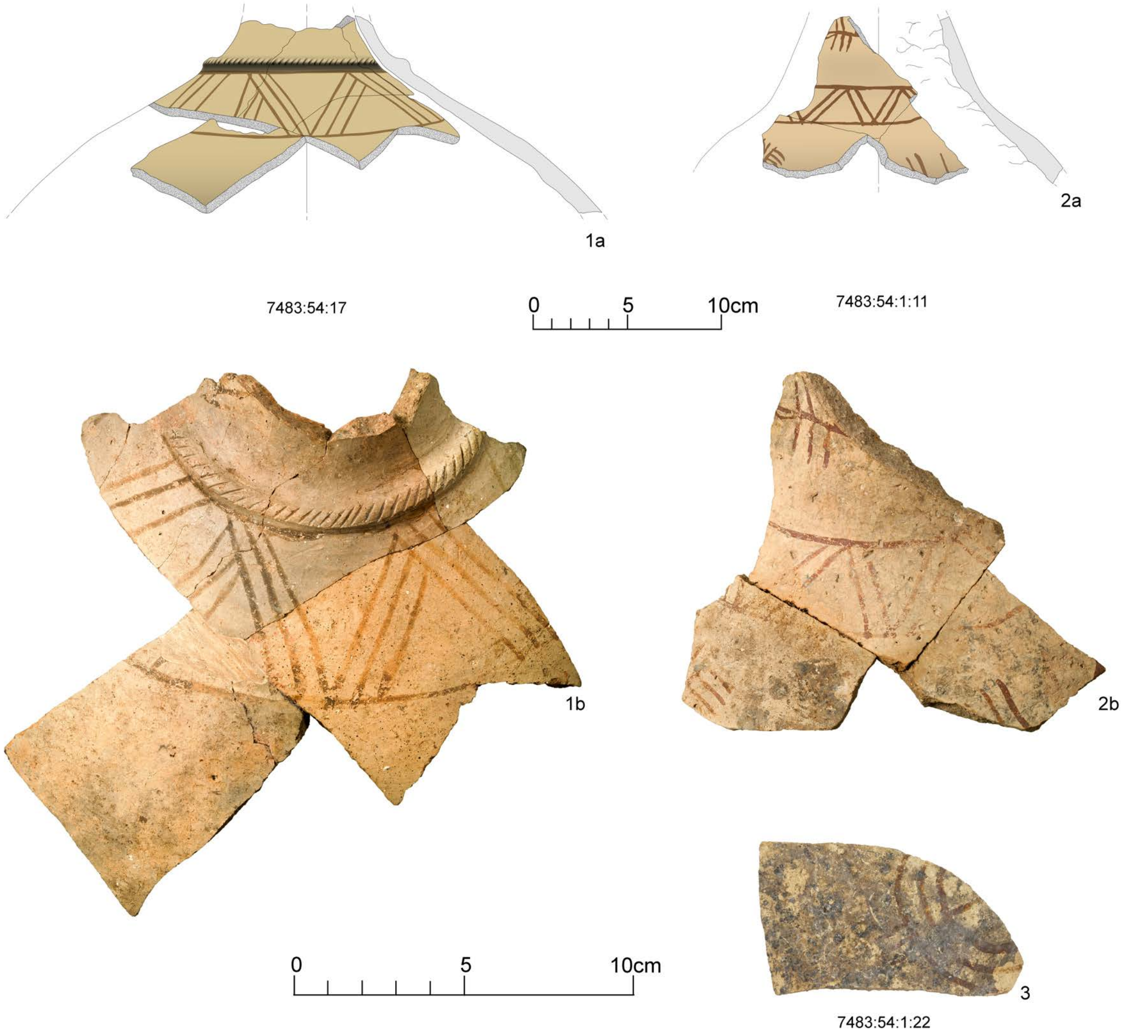

Figure 15: *Handmade Early Iron Age geometric painted pottery from Oymaağaç Höyük (drawings: Marie Klein; photos: Henning Marquardt).*

After listing and discussing the few Late Bronze Age comparisons, we have now reached the point where the relationship between the red-painted Late Bronze Age pottery, produced on a potter's wheel, and the handmade Early Iron Age pottery of Boğazköy and other Central Anatolian sites must be examined more closely. This pottery is also painted with mostly geometric patterns that are red in colour, and occurs from the 12th century up until the 9th century BC.[79] Based on the new findings from Boğazköy, Hermann Genz was able to attribute to this group similar pottery pieces from Alaca Höyük, Eskiyapar and Çadır Höyük, although published information about these finds is often very unsatisfactory.[80] Together with the publication of Early Iron Age pottery from the numerous surveys conducted by Mehmet and Nesrin Özsait in the province of Amasya and Samsun, a distribution of the red-painted and handmade Early Iron Age pottery in North-Central Anatolia and the southern parts of the Central Black Sea region becomes evident.[81] New finds from

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[79] Genz 2004, with further references.

[80] Genz 2004, 29.

[81] Cf. the distribution map in Genz 2003a, Fig. 1 and Seeher 2010, Fig. 2. For the material of the surveys by Mehmet and Nesrin Özsait, cf. Özsait and Özsait 2002; 2003.

Çadır Höyük, Uşaklı Höyük, Doğantepe and Oluz Höyük, as well as Oymaağaç Höyük confirm this picture (**Figure 16**).[82]

Surprisingly, the Early Iron Age handmade findings from Oymaağaç Höyük are not as numerous as the painted wheel-made ceramics from the Late Bronze Age. Only a few Early Iron Age fragments came to light during the excavations.[83] They were all found in one pit, and most of them could be assigned to two different vessels (**Figure 15.1–2**). Based on the graphic reconstruction, we were able to classify them as jugs/jars. Like the Late Bronze Age examples, they have a beige slipped surface on which the geometric motifs are painted in a red-brown colour. Both vessels are decorated with a pattern of triangles composed of several single lines between horizontal bands. Parallels are easily identified among the Early Iron Age material from Boğazköy-Büyükkaya and within our Late Bronze Age material (**Figure 9.9–10**).[84] All of the lines are painted strikingly thin, and may be the work of the same painter. On the smaller vessel, there are other motifs below this pattern – motifs that can be interpreted as irregularly positioned branches or herringbone motifs which do not occur among the Late Bronze Age material. But a jug from the Early Iron Age findings of Boğazköy-Büyükkaya can be compared to this composition.[85] At the junctions between neck and shoulder, the other reconstructed vessels from Oymaağaç Höyük show a very elaborated plastic band with diagonal incisions which have parallels among the Late Bronze Age material (**Figure 8.10, 8.12**). Finally, another fragment which did not fit to the others shows a circular motif (**Figure 15.3**). The pit (Locus:7483:54) that contained the painted sherds is situated in front of the south-western corner of the Late Bronze Age temple building (**Figure 2–3**), where, in a small area that also encompasses parts of the temple ruins, several Early Iron Age settlement traces came to light, among them a remarkable number of findings that indicate intense weaving activities.[86] By carrying out flotation on the pit's soil filling, it was possible to obtain material for radiocarbon dating, consisting of three barley seeds. After a modelled calibration by Pavol Hnila, the filling of the pit could be dated to 996–841 BC (95.4% probability).[87] According to the absolute chronology of the findings from Boğazköy-Büyükkaya, also based on radiocarbon dating, our date from Oymaağaç Höyük fits very well with the samples from the late phase of the Early Iron Age.[88] This assumption is confirmed by the occurrence of the herringbone and also by the circular motifs, both of which seem to be a later phenomenon in the Early Iron Age painted pottery from Boğazköy.[89] All this confirms the suggestion of Mehmet Ali Yılmaz, who already dated the first painted Early Iron Age pieces from Oymaağaç Höyük to the late phase of the Early Iron Age on the basis of an archaeological comparison.[90] Aside from the aforementioned pieces from the pit, only one further Early Iron Age painted pottery fragment was discovered at Oymaağaç Höyük – and it was found on the surface. The fact that only a small number of red-painted, handmade Early Iron Age fragments have been found is significant, but cannot be explained satisfactorily so far.

Based on the current research from Oymaağaç Höyük, we must conclude that there is a gap of around 250 years between the evidence of the geometric painted pottery of the Late Bronze and that of the Iron Age at the site. Nonetheless, the strong similarities between the two ceramic groups are obvious. This is confirmed by the archaeometric analysis, which shows no significant differences in terms of chemical composition.[91]

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[82] Çadır Höyük: Ross 2010, 71, Fig. 5a–b. Uşaklı Höyük: Orsi 2020, Pl. 2, 18–26, Fig. 3A, 10–11, 13–14. Doğantepe: Dönmez and Abazoğlu 2019, Fig. 9–10. Oluz Höyük: Dönmez and Abazoğlu 2019, 240–241, 243–244, Fig. 12–17. Oymaağaç Höyük: Czichon 2011c, 203, Abb. 14; Yılmaz 2014, 72, Fig. 2.5/3.7 and 3.8; 2016, 69–71, Abb. 29.3–4.

[83] Czichon 2011c, 203–204, Abb. 14; Yılmaz 2014, 72, Fig. 2.5d, 3.7; 2015, 162–163, Foto 23, Lev. 112.4, 113.4–5, 114.1, 115; 2016, 69–71, Abb. 29.3–4.

[84] Genz 2004, Taf. 19.5, 26.9, 31.8, 33.1.

[85] Genz 2004, Taf. 19.7.

[86] Czichon 2011c.

[87] Hnila 2019b, 66–67 (sample MAMS 32384).

[88] Genz 2004, 15, Tab. 2; Seeher 2018, 291, Tab. 5, 149–150 (Anhang 1).

[89] Genz 2003b, 116–118.

[90] Yılmaz 2015, 166.

If we now compare the wheel-made and the handmade pottery on a supra-regional level, it becomes clear that the two ceramic groups are very similar in terms of the basic character of their geometric paintings. Differences can be seen above all in the production technique and in some motifs, such as the herringbone patterns or the special circular motifs, such as the ray beams that were introduced in the Early Iron Age.[92] Given the current state of research, it is very difficult to establish similarities or continuities of the vessel shapes because the dataset is too small. Thus, the Oymaağaç Höyük jugs from the two periods are very similar to one another, but there are no comparable pieces among the Early Iron Age material from Boğazköy. However, one piece is worth mentioning here.[93] The cauldron-like large pots with in-turning upper part, which dominate the Oymaağaç Höyük Late Bronze Age material, seem to continue into the Early Iron Age – although with some changes – as shown by comparisons from the Büyükkaya material.[94] On the other hand, bowls cannot easily be compared because there are only a few of them among the Oymaağaç Höyük material, and the most frequent Early Iron Age shape with reinforced rim on the inner side have not yet been uncovered among the Late Bronze Age repertoire.[95] One could conclude, taking general considerations into account, that the differences between the form repertoire of the geometric red-painted pottery of the Late Bronze Age and that of the Early Iron Age, as well as the differences found within the Early Iron Age material, may be attributed to the different conditions surrounding the two different production techniques. The more complex potter's wheel technology requires a more or less professionally organised set-up, while handmade vessels can be produced in virtually any household, which does not mean, however, that handmade pottery was generally household produced. Especially for the Middle Iron Age, an advanced pottery production can be assumed. But it is remarkable that the material published so far seems to indicate a greater variability during the Early Iron Age when comparing the pottery of the different sites.

Nevertheless, the similarities between the Late Bronze Age and the Early Iron Age geometric red-painted pottery are so striking that we may certainly consider the wheel-made Late Bronze Age pottery to be the forerunner of the Early Iron Age handmade pottery, or – put differently – the Early Iron Age painted pottery to be the successor to the Late Bronze Age pottery.[96] Also evident here is that both groups are – as far as we can tell from the current state of research – mainly distributed across North-Central Anatolia and the Central Black Sea region (**Figure 16**). As a consequence, we consider both ceramic groups to belong to one pottery tradition, which continued after the transition from the Bronze to the Iron Age – i.e. after the fall of the Hittite Empire – and changed over time from involving wheel-made to handmade production.

It is important to note that the development from wheel-made painted pottery in the Late Bronze Age to handmade painted pottery in the Early Iron Age cannot only be observed at Oymaağaç Höyük but probably also at Oluz Höyük, two excavation sites that lie far to the north. Based on the new research presented here concerning the painted pottery of the 2nd millennium BC, further finds must be re-evaluated and re-dated, as we did for the survey finds from İnandıktepe (see above). Thus, among the survey material from the provinces of Amasya and Samsun, which Mehmet and Nesrin Özsait classified as being Early Iron Age, there are also a few pieces produced on the potter's wheel from the sites of Küçük Küllük near Merzifon and Yeniköy-Ada near Hamamözü that could therefore belong to the Late Bronze Age (**Figure**

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[91] Cf. Kibaroğlu *et al.* in this volume.

[92] Genz 2003b, 116–118.

[93] Genz 2004, Taf. 35.10.

[94] Genz 2004, Taf. 19.5–6, Taf. 27.2, 4, Taf. 33.2–3, 5, Taf. 35.4–5.

[95] For the Early Iron Age bowls with internally reinforced rim, cf. Genz 2004, Taf. 19.2–3, 25.20, 26.2–4, 32.1–6.

[96] This has already been thought by Mehmet Ali Yılmaz (Yılmaz 2015, 249; 2016, 69–70).

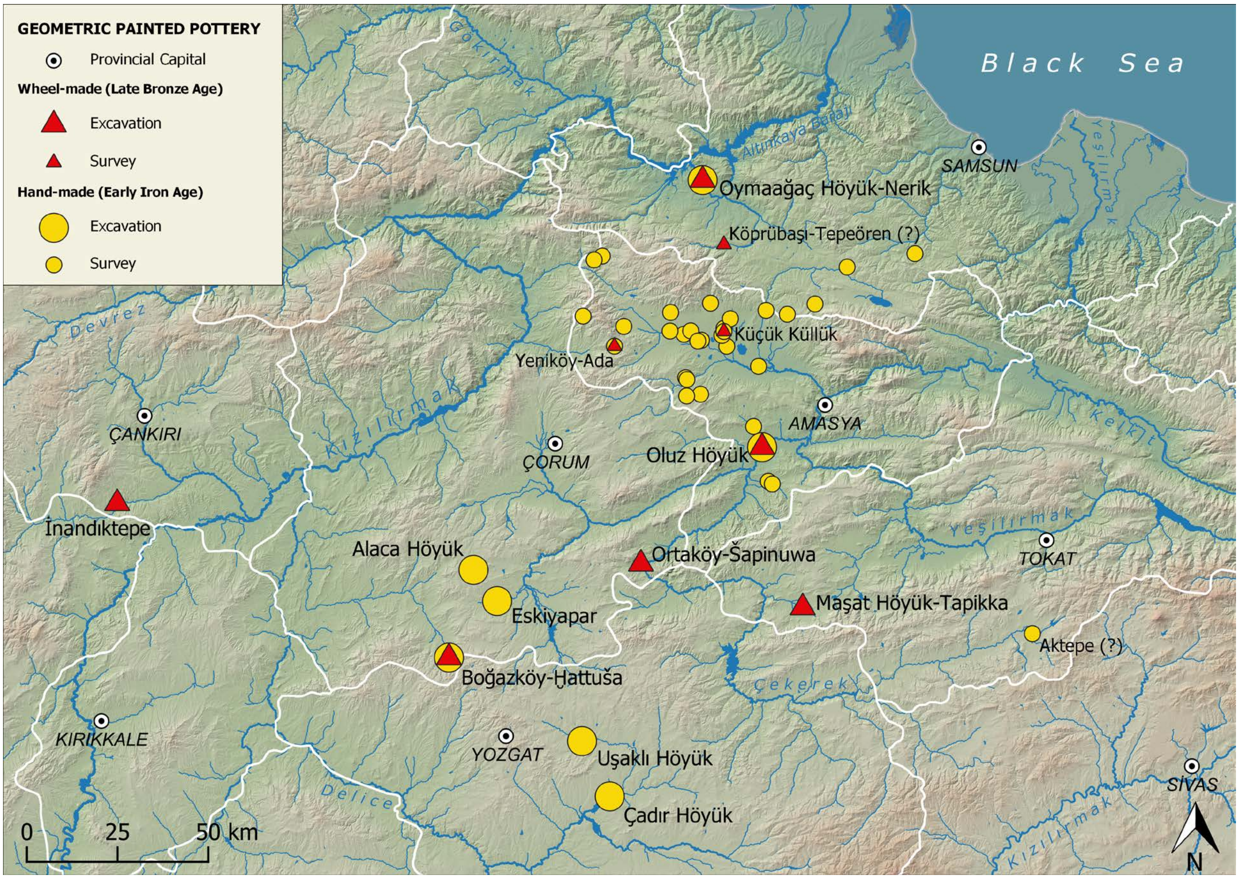
GEOMETRIC PAINTED POTTERY
Provincial Capital
Wheel-made (Late Bronze Age)
Excavation
Survey
Hand-made (Early Iron Age)
Excavation
Survey
Black Sea
Gökırmak
Altınkaya Barajı
SAMSUN
Yeşilırmak
Oymaağaç Höyük-Nerik
Köprübaşı-Tepeören (?)
Devrez
Küçük Küllük
Yeniköy-Ada
Kızılırmak
AMASYA
Kelkit
ÇANKIRI
ÇORUM
Oluz Höyük
İnandıktepe
Yeşilırmak
Alaca Höyük
Ortaköy-Šapinuwa
TOKAT
Eskiyapar
Maşat Höyük-Tapikka
Aktepe (?)
Boğazköy-Ḫattuša
Çekerek
KIRIKKALE
YOZGAT
Uşaklı Höyük
Delice
SIVAS
Çadır Höyük
Kızılırmak
0
25
50 km
N

Figure 16: *Distribution map of the wheel-made Late Bronze Age and the handmade Early Iron Age geometric painted 'Kaška' pottery in North-Central Anatolia and the Central Black Sea region (map: Dirk Paul Mielke).*

12.3–5).[97] Of even greater interest is a survey find from Köprübaşı-Tepeören (**Figure 12.2**), which is especially relevant as the site is situated around 18.5 kilometres south of Oymaağaç Höyük. The small settlement, which was discovered during a survey conducted by Tönnes Bekker-Nielsen and Kristina Winther-Jacobsen in 2013, yielded a larger amount of Hittite pottery – mainly from the Old Hittite period – as well as Iron Age pottery.[98] The body sherd, which is probably wheel-made, can easily be considered alongside the findings from Oymaağaç Höyük. However, the information presented in publications is often insufficient, such as in the case of the piece from Aktepe/Bolus, which Hermann Genz classified as Early Iron Age and for which no information about the method of production was given.[99] A direct autopsy of many pieces is therefore desirable. But caution should be exercised here because the material from Boğazköy-Büyükkaya, published by Hermann Genz, also includes three pieces produced on the potter's wheel (**Figure 14.8–10**).[100] Unfortunately, these findings are mainly unstratified, but after our research, it stands to reason that they are original from the Late Bronze Age layers of Büyükkaya.[101] However, it is noteworthy that one of these pieces (**Figure 14.9**) is well stratified and comes from the oldest phase of the Early Iron Age layers. This important fragment indicates that simply assigning painted pottery produced on the potter's wheel to the Late Bronze Age and painted pottery made by hand to the Early Iron Age is not as accurate a division as it had seemed. Rather, it would appear that – as proven by the material from Büyükkaya – transitions took place along the way, as wheel-made production was gradually replaced by handmade production.[102] This shows once again that the evaluation of survey finds is always difficult and that reliable information can only be obtained through well-monitored excavations. Now we will consider how all these new insights might be interpreted from a historical perspective.

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[97] Rim sherd of a pot from Küçük Küllük (Özsait and Özsait 2002, 87, Fig. 2.3, Pl. II.1; 2003, 208, Pl. III.3), body sherd from Küçük Küllük (Özsait and Özsait 2002, 88, Fig. 2.8, Pl. II.4), body sherd from Yeniköy (Özsait and Özsait 2002, 89, Fig. 5.2, Pl. VI.4), rim sherd of a bowl from Onhoroz (Özsait and Özsait 2002, 88, Fig. 1.1, Pl. III.1); the last piece is uncertain because it was classified in Özsait and Özsait 2003, 207, Pl. II.1 as handmade and belongs to a type that only seems to be present in the Early Iron Age.

[98] Bekker-Nielsen 2021.

[99] Genz 2004, 28 with footnote 158. The piece was originally published by Durbin 1971, 107, Fig. 3.32.

[100] Genz 2004, Taf. 4.13, 35.10, 36.11. I would like to express my gratitude to Dr. Jürgen Seeher and Prof. Hermann Genz who provided me with detailed information about these pieces. Jürgen Seeher informed me about a further red-painted body sherd with horizontal grooves that has not yet been included in any publications but which supplements the three pieces included in Hermann Genz's report.

Historical interpretation

The site-level and supra-regional-level evaluations of the new Late Bronze Age geometric painted pottery from Oymaağaç Höyük carried out on the previous pages provide the basis for a first general historical interpretation. Looking first at the distribution, the comparisons to our pottery that were described above indicate a distribution area on the northern edge of the Hittite Empire, with İnandıktepe in the west, Maşat Höyük in the east and Boğazköy in the south (**Figure 16**). However, a broad spectrum of vessel shapes and, above all, a stratigraphically secured long-term occurrence is attested so far only at Oymaağaç Höyük. The painted pottery tradition is obviously part of the settlement history of Oymaağaç Höyük and can only be understood with difficulties as foreign objects imported during several single events. The finds from İnandiktepe, Maşat Höyük and Boğazköy, however, are – based on what we know so far – only a few individual pieces, which can be regarded as imports without greater problems. On the other hand, the situation of this pottery at Oluz Höyük is not yet clear because the material is still being processed. As stated above, all of this leads to the conclusion that with the geometric painted pottery from Oymaağaç Höyük we have discovered a previously unknown, independent, local – or even regional – pottery tradition. This hypothesis is quite clearly attested by the archaeometric analyses that confirm a local or regional production. Consequently, we rule out any direct connection with other Late Bronze Age traditions of painted pottery in Anatolia as presented in this volume, although the origins of these traditions may overlap. Thus, for the first time at a Hittite site – or more precisely at the cult city of Nerik – a contemporary ceramic group of obviously local origin has been confirmed to exist alongside the dominant Hittite pottery. It is self-evident that the pottery is connected with something that occurs only there and that is not Hittite. Now it is time to bring the archaeological information together with the historical tradition, or, as Roger Matthews and Claudia Glatz aptly put it, to unite 'text and archaeology in concert'.[103] In doing so, the region's historical Hittite tradition, which was briefly referred to in the introduction, and in particular the historical Hittite tradition of the city of Nerik, leads unequivocally to the conclusion that this pottery must be associated with the so-called Kaška people.[104] These are groups of people who were resident in this region and who sometimes acted with, but mostly against the Hittites. The painted pottery from Maşat Höyük referred to above also fits in well here as the Hittite settlement of Tappika was located on the border of the areas that were obviously settled by the Kaška.[105] But it is unclear and controversial what exactly is hidden behind the term Kaška. That the Kaška were a clearly definable ethnic unit can certainly be ruled out. Rather, it may be assumed that this was a kind of collective term used by the Hittites for different groups in the northern regions. While the Kaška are only identifiable in the historical sources from the 15th century BC onwards, this does not mean that they were not there before or that they migrated.[106] Referring to this, it is important to emphasise that the painted pottery is to be understood best as an autochthonous cultural phenomenon due to the above demonstrated connections to Middle and Early Bronze Age pottery shapes and decorations. In this context, the discovery of a ceramic fragment with polychrome painting from Oymaağaç Höyük is of importance, as it belongs to the so-called Cappadocian/Alişar III Ware, a pottery group that was widespread in Central Anatolia at the end of the Early and during the Middle Bronze Age.[107] This is one of the northernmost finds of this ware to date. The piece potentially indicates that the tradition of geometric painted pottery was also at home in the Central Black Sea region, so that the Late Bronze Age geometric painted pottery from Oymaağaç Höyük may have derived from local traditions. In his article 'Who were the Kaška', Itamar Singer presented corresponding and above all also convincing theories regarding an autochthonous ethnogenesis of the Kaška.[108] Even before the discovery of the Late Bronze Age painted pottery in Oymaağaç Höyük, the Early Iron Age red-painted pottery, which we understand to be part of a common pottery tradition, was already associated with the Kaška with convincing arguments.[109] According to this argumentation, the Kaška would have spread from the Black Sea region in the north down to the south, in a vacuum created after the fall of the Hittite Empire during the Early Iron Age. But we have to bear in mind that analysing the archaeological evidence of migration is a difficult and complex task. The Late Bronze Age painted pottery finds may also support the theory that the Kaška may occasionally have been present in the northern parts of the Hittite Empire before that time. Another related aspect that has been intensively discussed in relation to the Early Iron Age painted pottery is the number of striking similarities between some of the shapes and decoration of the Early and Middle Bronze Age and the Iron Age pottery, which can only be explained by some kind of connection between the two periods.[110] Already at a very early stage of research Kurt Bittel had explained this by a gap in the pottery tradition of Central Anatolia and the continued existence of corresponding ceramic traditions in peripheral areas.[111] Recent research into the Early Iron Age pottery carried out during the excavations on Boğazköy-Büyükkaya connects the – at this point archaeologically intangible – Kaška with this idea.[112] With the Late Bronze Age geometric painted pottery from Oymaağaç Höyük, this 'missing link' now seems to have been found. As explained above, on the one hand some forms contain clear references to older shapes and decorations dating back to the Early and Middle Bronze Age and, on the other hand, the pottery already has features that are associated with the Iron Age, which is particularly evident when examining the faceted rims but can also be seen in some decoration patterns. In this respect, the processing of the Early Bronze Age ceramics from Oymaağaç Höyük will also constitute an important archaeological contribution which, according to our preliminary results, is not completely different from the pottery developments in Central Anatolia. With the geometric painted Late Bronze Age pottery of Oymaağaç Höyük, we are thus capturing a tradition of painted pottery from the northern edge of the Hittite Empire or cultural area that not only reflects traditions from older periods but also anticipates phenomena of the Iron Age.

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[101] Seeher 2018, 37–88.

[102] Seeher 2018, 104; 2004, 24–26.

[103] Matthews and Glatz 2009.

[104] Cf. the cited works in footnotes 3–4. For Nerik, cf. Haas 1970.

[105] Mielke 2011, 1045–1047; 2013, 208–214.

Until now, the Kaška of the Late Bronze Age have been archaeologically elusive, which has given rise to many speculations about their culture.[113] The main reason for this elusiveness, which has been repeatedly cited but which has rarely been taken into account in all these speculations, is undoubtedly the lack of larger and longer-term excavations in the region. Furthermore it must be stressed out that the discovery of the painted pottery from Oymaağaç Höyük is the result of long and laborious archaeological analyses of the material but also of the other findings that came to light during the excavations. However, we are only just beginning to understand the importance of this pottery for the history of Nerik. The ‘Kaškaen’ paintings on ‘Hittite’ funnel-rim pots, which may be an expression of cultural interactions, demonstrate the dimensions for questions of cultural history. Likewise, the obviously limited range of shapes indicates that the painted pottery had a special social significance; most likely the pieces were used as serving and/or dining vessels during feasting activities. Finally, the symbolic meaning of the painted pottery must be investigated in detail because painted decoration may also be understood as symbolic communication in a semiotic sense. It is likely that coevals were aware of the fact that these ceramics meant ‘Kaškaen’ (or ‘non-Hittite’) and were thus understood as part of some kind of cultural identity.

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[106] Klinger 2005; 2002.

[107] Mielke 2019b, 82–83, Abb. 24.2. For the Cappadocian/Alişar III Ware cf. Manuelli and Mielke in this volume.

[108] Singer 2007.

[109] Cf. the overview of Seeher 2010 with further references.

[110] Genz 2004, 37–44; 2005; Seeher 2010, 223–224.

[111] Bittel 1936, 15.

[112] Seeher 2018, 105 with references to the current discussion.

[113] E.g. Dönmez 2002; 2010; Dönmez and Abazoğlu 2019; Glatz and Matthews 2005; Matthews and Glatz 2009, Singer 2007; Yakar 2008.

Finally, the results of the archaeometric investigations of the painted pottery from Oymaağaç Höyük indicate a diverse and non-centralized organisation of the production.[114] In contrast to the clay deposits of the Hittite pottery, the raw material sources for the painted pottery are mainly located to the north and north-west of the site of Oymaağaç Höyük. This might be a reflection of different settlement areas of the Hittites on the one hand and Kaška people on the other hand. It seems that the Kızılırmak was an important regional border in the Hittite-Kaška relationship.

This first summary of the new pottery group found at Oymaağaç Höyük is not the place to theorise about the fundamental character or the problems of combining archaeological and historical data.[115] Nor is it the place to discuss the complex interrelationships between material culture and ethnic groups.[116] Nevertheless, a connection between the Late Bronze Age and Early Iron Age traditions of geometric painted pottery and the historically known Kaška people is more than obvious on the basis of the currently available information, but it must be discussed in more detail how these new insights contribute to our knowledge and understanding of the Kaška phenomenon.

However, it may be assumed that this kind of pottery represents only a part of the material identity of the Kaška and that it neither included all groups, nor existed everywhere, nor even was it specific to a certain group. A regional connection may well have been of greater importance. The geometric Late Bronze Age painted pottery from Oymaağaç Höyük represents thus an important milestone for the archaeology of the Kaška and in the scientific debate about them. However, the story does not end here because, in the course of processing the Late Bronze Age ceramic material from Oymaağaç Höyük, we were also able to identify some unpainted, non-Hittite but Late Bronze Age pottery that shows clear connections to the painted pottery presented here.

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[114] Cf. Kibaroğlu *et al.* in this volume.

[115] E.g. Andrén 1998; Liverani 1999; Zimansky 2005.

[116] Jones 1997.

the laborious processing of the new pottery group. Furthermore, the research was based on the results of and in particular the scientific exchange with numerous colleagues, of whom Dr. Filiz Divarcı (Edirne), Prof. Şevket Dönmez (İstanbul), Prof. Hermann Genz (Beirut), Dr. Claudia Glatz (Glasgow), Prof. Önder İpek (Çorum), Prof. Roger Matthews (Reading), Prof. Andreas Schachner (İstanbul), Dr. Jürgen Seeher (İstanbul), Dr. Geoffrey Summers (Ankara) and Prof. Aygül Süel (Çorum) deserve a special mention here.

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Archaeometric Investigations of Late Bronze Age Painted Pottery from Oymaağaç Höyük/Nerik, Central Black Sea Region, Türkiye

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Abstract

During the excavations at Oymaağaç Höyük, the Hittite city of Nerik, a previously unknown group of Late Bronze Age painted pottery, which obviously existed besides the dominating Hittite pottery, was identified. This newly discovered ceramic group belonged to an independent regional pottery tradition of the Central Black Sea region and it is likely that it can be associated with the so-called Kaška people. Because of its historical importance, archaeometric analyses were carried out to examine the material characteristics of this pottery and to answer questions of its production technique and provenance. For a meaningful evaluation, the archaeometric data of the painted pottery were compared with that of the contemporary Late Bronze Age Hittite pottery from Oymaağaç Höyük. In the course of the archaeometric investigations, chemical analysis, petrographic thin section analysis and Raman spectroscopy were conducted. The results reveal new and important insights with historical significance.

Keywords

Oymaağaç Höyük, Nerik, Late Bronze Age, geometric painted pottery, archaeometry

Özet

Hitit şehri Nerik olduğu düşünülen Oymaağaç’ta yapılan arkeolojik kazılarda, yaygın olarak bulunan Hitit seramiklerinin yanında, daha önce bilinmeyen ve Geç Tunç Çağı’na tarihlenen yeni bir boyalı mal grubu ayırt edilmiştir. Bu mal grubu Orta Karadeniz Bölgesi seramik üretim geleneğine aittir ve muhtemelen Hitit yazılı kayıtlarında geçen Kaškalar ile ilişkilidir. Tarihsel öneminden dolayı söz konusu mal grubunun materyal özelliklerini belirlemek, üretim tekniği ve üretim yeri gibi sorulara cevap bulabilmek amacıyla arkeometrik yöntemlerle analizler yapıldı. Bu analizlerin sonuçlarını, belli bir arkeolojik konteks içinde yorumlayabilmek için, yine Oymaağaç’ ta bulunan Hitit seramiklerinden alınan bazı örnekler de aynı şekilde arkeometrik açıdan incelendi ve veriler birbirleriyle karşılaştırıldı. Seçilen seramik örnekleri kimyasal, petrografik ve Rama spektroskopisi gibi yöntemler kullanarak incelenmiştir. Elde edilen veriler bölgenin tarihiyle ilgili yeni ve önemli sonuçlar sunmaktadır.

Anahtar Kelimeler

Oymaağaç Höyük, Nerik, Geç Tunç Çağı, geometrik boyalı seramik, arkeometri

LATE BRONZE AGE PAINTED POTTERY TRADITIONS (ARCHAEOPRESS 2022): 59–80

Introduction

During the excavations at Oymaağaç Höyük, the Hittite city of Nerik, carried out from 2007 to 2019, a previously unknown group of Late Bronze Age painted pottery was identified beside to the well-known Hittite vessel spectrum.[1] So far, 379 painted pottery fragments have been identified, which corresponds to a total share of three percent of the entire Late Bronze Pottery assemblage. This new pottery group is characterized by decorations with sketchy painted geometric motifs in red, red-brown and sometimes a dark-brown colour (**Figure 1**). All pieces are wheel-made, fired under oxidizing atmosphere and of high-quality craftsmanship. From an archaeological point of view, the clay was well prepared with mineral temper of small or medium size, although larger inclusions can occasionally be found. According to its macroscopic appearance, the painted pottery represents a more or less homogeneous group with limited variations (**Figure 2**). Therefore, all pieces were classified as belonging to a single ware, denominated as Late Bronze Age Geometric Painted Ware (LBA GPW). This new discovered group of painted pottery belonged to an independent regional pottery tradition of the Central Black Sea Region, and it is likely that it can be associated with the so-called Kaška people. Because of its historical importance, archaeometric analyses were carried out to examine the material characteristics of the new pottery group. For a meaningful evaluation, the archaeometric data of the painted pottery were compared with that of the contemporary Late Bronze Age Hittite pottery from Oymaağaç Höyük, as both pottery groups show similar production techniques.

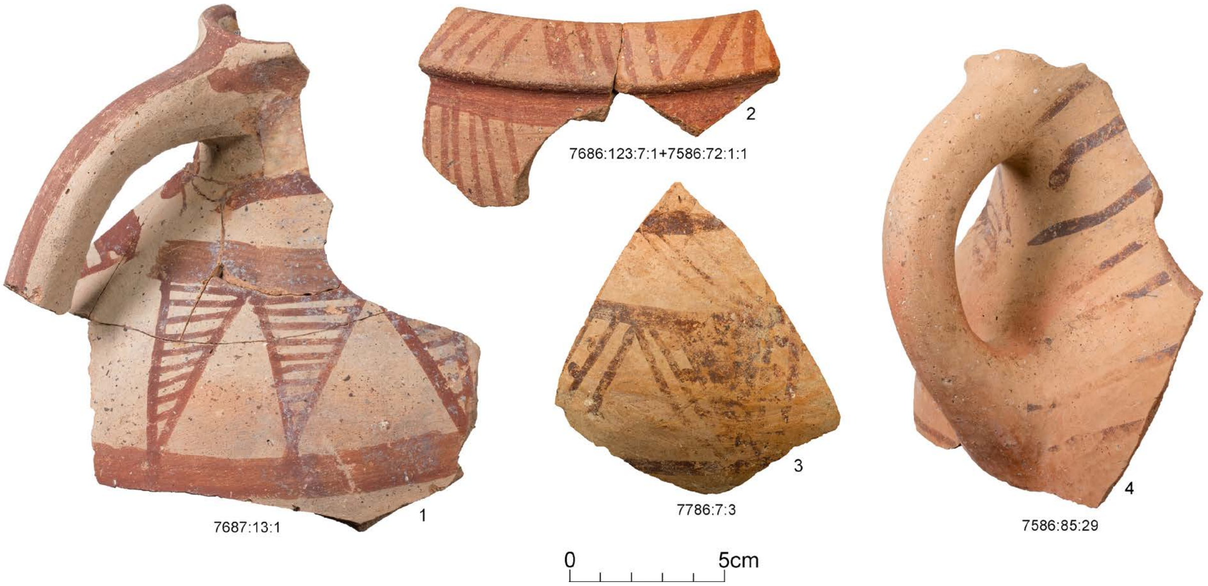

Figure 1: *Examples of the Late Bronze Age geometric painted pottery from Oymaağaç Höyük (photos: Burak Çümen).*

In the course of the archaeometric investigations at Oymaağaç Höyük, mainly chemical and petrographic analyses were undertaken in order to answer questions related to the production and significance of the ceramic objects. The largest quantity of objects was investigated by chemical analysis. During the excavation campaign of 2017 more than 591 ceramic objects from all periods represented on the site were analysed for their chemical composition with a handheld portable XRF device.[2] Of these, 125 Late Bronze Age painted pottery sherds and 174 Late Bronze Age Hittite pottery sherds were analysed. For

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[1] For a detailed description and historical interpretation of this pottery cf. the contribution of D.P. Mielke in this volume.

[2] Behrendt 2019; Behrendt *et al.* 2018.

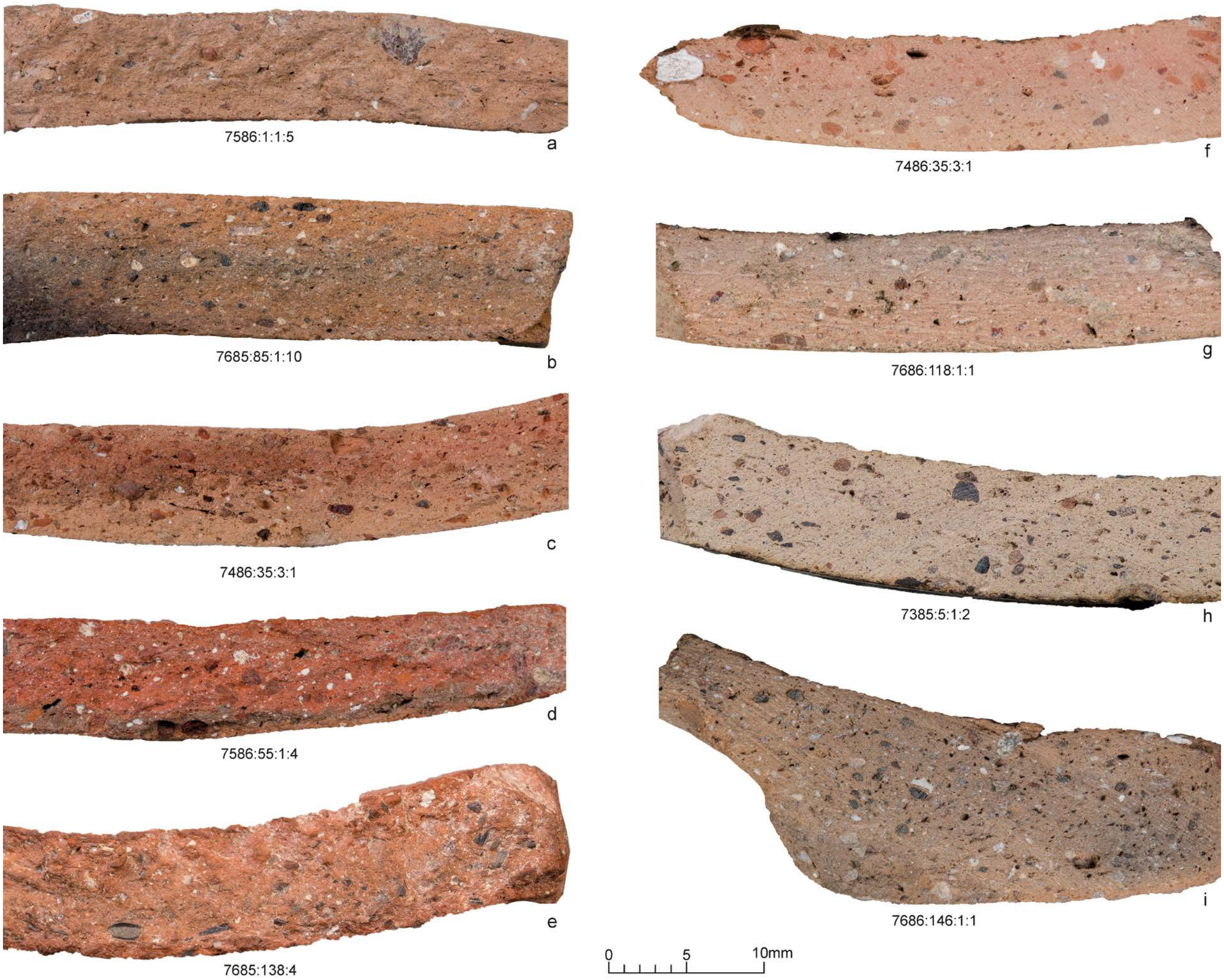

Figure 2: *Broken and polished profile sections of Late Bronze Age geometric painted pottery ware samples from Oymaağaç Höyük (photos: Dirk Paul Mielke).*

the petrographic analysis, 70 samples were selected during the excavation campaigns of 2015 and 2016, of which 23 belong to the Late Bronze Age painted pottery group and 30 to the Late Bronze Age Hittite pottery. Of all the pieces examined, 13 samples of the painted pottery group and 13 of the Hittite pottery were analysed with both methods. In addition, one Early Iron Age painted pottery fragment, which has a close relationship to the Late Bronze Age painted pottery group, was also analysed by petrographic thin section.[3] Finally, six samples were selected for pigment analysis of the painted decoration using Raman spectroscopy. The following report gives a first overview of the evaluation of the archaeometric study on the Late Bronze Age painted pottery from Oymaağaç Höyük. Before presenting the results of the chemical, petrographic and pigment analyses, it is necessary to take a short look at the geological setting of the site and its surroundings, because the geological conditions determine the raw materials available for pottery production in the region.[4]

D. P. M.

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[3] For the painted Early Iron Age pottery cf. Mielke in this volume.

[4] First geological work about the setting of the site of Oymaağaç Höyük was conducted by von Seckendorff 2006 and Sobott *et al.* 2016.

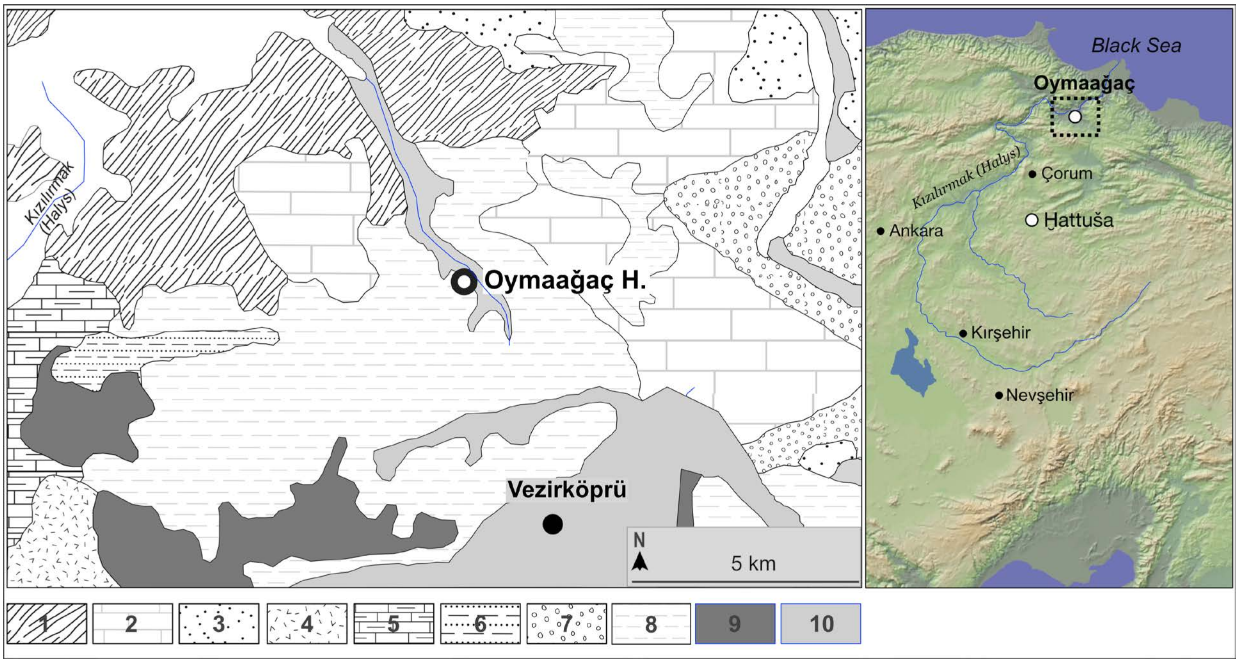

Figure 3: *Geological map of Oymaağaç Höyük and its surroundings (modified from Turkish Geology Map of MTA 2002, 1:500,000 scale, Sinop sheets). Legend: 1 – Triassic-Jurassic schist, marble, metabasite, serpentinite, 2 – Jurassic-Cretaceous limestone, 3 – Lower Cretaceous clastic and carbonate rocks, 4 – Cretaceous volcanic and sedimentary rocks, 5 – Cretaceous clastic and carbonate rocks, 6 – Cretaceous-Eocene clastic and carbonate rocks, 7 – Eocene clastic rocks, partly continental, 8 – Miocene lacustrine limestone, marl, shale, 9 – Pleistocene continental clastic rocks, 10 – Quaternary deposits.*

Geological setting of the site

The site of Oymaağaç Höyük is located at the northern end of the fertile basin of Vezirköprü, next to the small village of Oymaağaç. The surroundings encompass the Vezirköprü basin, the silver- and copper-rich Tavşan dağları to the south around 15 kilometres away from the höyük, the impressive Küre dağları to the north and the river bed of the Kızılırmak, which flows from west to east around seven kilometres to the north of the site. The study area of Oymaağaç Höyük and its surroundings is located in the Central Pontides, a geographic term describing the northward arched section of the Pontide mountain chain. The surface geology of the region is the result of the long-standing, multifaceted geological evolution of the region. The Central Pontides are usually divided into two east-west trending geological zones or terranes: the Istanbul Zone in the west and the Sakarya Zone in the east. Both are unconformably overlain by Jurassic and younger sedimentary cover.[5] In the study area, different rock types are exposed (**Figure 3**). The oldest rocks are exposed in the north and west of Oymaağaç, belonging to the so-called Central Pontide Metamorphic Supercomplex (CPMS) that mainly consists of cretaceous metabasite, mica schist, marble, phyllite, metasandstone and serpentinite lenses.[6] The metamorphic rocks are unconformably overlain by Cretaceous shallow marine carbonates (Inaltı formation),[7] and in the study area these are exposed in the west and east areas of the basin. To the north of Oymaağaç marl, shale, and sandstone (Çağlayan formation) are exposed. The basin itself consists of Miocene lacustrine limestone, marl and shale. Quaternary alluvial is limited and occurs only alongside the small rivers and streams which flow to the Kızılırmak and in the surroundings of the Vezirköprü basin.

M. K.

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[5] E.g. Okay and Tüysüz 1999; Okay *et al*. 2006.

[6] Okay *et al*. 2018.

[7] Okay *et al*. 2006; 2018.

Methods

Chemical analysis

The analyses of the chemical composition of the pottery samples were conducted with a portable handheld X-ray fluorescence spectrometer (p-XRF). The advantage of this device and the reason why this method was chosen for our work was the possibility for direct and non-destructive measurements of objects on-site, at the excavation depot in Oymaağaç and in the museum of Samsun. Furthermore, a large number of samples can be analysed in a short time and with low costs. On the other hand, this instrument provides a lower detection depth compared to conventional laboratory methods. The experience from a previous research project with similar pottery during which some feasibility studies were also conducted to determine the potential and the limits of these devices more precisely, has made us confident in applying this method to the ceramic samples from Oymaağaç Höyük.[8] When using p-XRF in ceramic research, a large number of complex factors (e.g. surface treatment, influence of temper, measuring time, etc.) must be taken into account in the measurements and interpretation of the data.[9]

In the present study, a portable X-ray fluorescence analyser Niton XL3t -GOLDD+ Hybrid from the Thermo Fisher Scientific company was used. The analyser has a silicon drift detector and an X-ray tube with a silver anode (50 kV, 40 µA, 2 W). The measuring spot (sample area) was set to a diameter of eight millimetres. The device was provided to us from the Freie Universität Berlin, Institute for Geographical Sciences.[10] In order to obtain the originally produced clay mass, the measurements were taken at the core of the sherds at an area of fracture. For this procedure, superficial depositions (mainly sinterings) of each ceramic fragment were carefully removed with a scraper and the surface was then cleaned with a brush. The measuring time was set at 180 seconds. The portable-XRF allows the qualitative and quantitative or semi-quantitative analysis of 35 elements but not all are evaluable.[11]

S. B.

Petrographic thin section analysis

Petrographic thin section analysis is a conventional and useful technique widely applied to archaeological ceramic materials.[12] It enables correct material identification and characterization, for example, it enables the grouping of vessels according to similarity or dissimilarity of their material characteristics, comparing material-based data to archaeological or art-historical data, identifying possible raw material sources for the object or some of its components, identifying and studying workshops, reconstructing production technology, examining technological changes and variations over time and space, and explaining technological choice.[13] In this study, petrographic analysis was carried out on thin sections that were prepared from the selected sherds from Oymaağaç Höyük using a standard polarizing microscope at the Eberhard Karls University of Tübingen, Germany (using Zeiss Axio Imager 2, equipped digital camera (Zeiss AxioCam Mrc). All in all, 54 samples were analysed, of which 23 (43%) belong to the Late Bronze Age painted pottery group – plus one painted fragment from the Early Iron Age – and 30 (57%) to the Late Bronze Age Hittite pottery. The thin sections for the petrographic analysis were prepared at the thin section laboratory of the Dokuz Eylül University, Vocational School of Torbalı in Izmir.[14]

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[8] Behrendt and Mielke 2014.

[9] Cf. Behrendt *et al*. 2012a; 2012b.

[10] We would like to thank Dr. Philipp Hoelzmann and Frank Kutz from the Institute for Geographical Sciences at the Freie Universität Berlin for their kind support.

[11] The measurable elements are aluminium (Al), antimony (Sb), arsenic (As), barium (Ba), bismuth (Bi), lead (Pb), cadmium (Cd), calcium (Ca), cerium (Ce), chlorine (Cl), chromium (Cr), cobalt (Co), iron (Fe), gold (Au), potassium (K), copper (Cu), magnesium (Mg), manganese (Mn), nickel (Ni), niobium (Nb), phosphorus (P), mercury (Hg), rubidium (Rb), sulphur (S), selenium (Se), silver (Ag), silicon (Si), strontium (Sr), titanium (Ti), uranium (U), vanadium (V), yttrium (Y), zinc (Zn), tin (Sn), zirconium (Zr).

[12] For the preparation of thin sections and an overview of general application of this method cf. Reedy 2008; Kibaroğlu and Thumm-Doğrayan 2013 and Quinn 2013.

[13] Quinn 2013.

M. K.

Raman spectroscopy

Raman spectroscopy for the pigment analyses were performed with a Horiba XploRa Raman microscope with confocal optics. The laser wavelength was 638 nm using a X-Y-Z sample desk with step motors. The magnification factor was 10x for optical evaluation and 50x for the measurements. To avoid thermal decomposition of the pigments, the laser power was set on 0.2 mW. The spectral range was 100 to 1500 wave-numbers. Every spectrum was recorded by an addition of 10 to 100 scans. Data processing and evaluation were done with LabSpec© and our own software. Baseline correction and smoothing by Savitzky Golay function was used for better comparability. For each sample, micro-Raman configuration and parameters were optimized individually.

T. V.

Results

Chemical analysis

The first step of the archaeometric work on the Late Bronze Age painted pottery was the chemical analysis with a portable XRF device, with which we intended to get a first overview of the general character of the pottery in question. To put the results into perspective, samples of the contemporary Hittite pottery were also examined. All in all, a total of 299 samples were chemically analysed, of which 125 (42%) belong to the painted group and 174 (58%) to the Hittite Late Bronze Age pottery group.[15] For the chemical analyses we decided to analyse both pottery groups together to get a first overview of their general characteristics. From the 35 analysed elements only 11 could be used for the statistical evaluation because of the validation of the measurement precision and accuracy. Generally, the chemical element composition of a particular pottery group results from the specific conditions of the used raw materials. For the ceramic in question, the elements strontium (Sr), zirconium (Zr), rubidium, (Rb) niobium (Nb), iron (Fe), vanadium (V), zinc (Zn), titanium (Ti), potassium (K), calcium (Ca) and aluminium (Al) were found to be particularly characteristic and also easily measurable.

The evaluation of the data obtained with the portable XRF was carried out using multivariate statistical methods. The group formation was based on the chemical composition of the ceramic using principal component analysis. Compared to laboratory methods, the smaller number of measurable and evaluable elements and their lower measuring precision leads to greater complexity in statistical evaluation because the chemical differences are often not clearly distinguishable. As a result of the statistical evaluation, diagrams are created in which the individual objects are listed as points. The more similar the objects are in their chemical composition, the closer they are to each other in the diagram. In an ideal case, there are accumulations of points in the diagram, so-called point clouds. These point clouds represent a statistical group. As a result of the principal component analysis for the Late Bronze Age

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[14] We would like to thank Dr. Altuğ Hasözbek (Dokuz Eylül Üniversitesi, Izmir) for the organisation and realisation of the thin sections.

[15] A complete list of the analysed objects will be presented in the final publications.

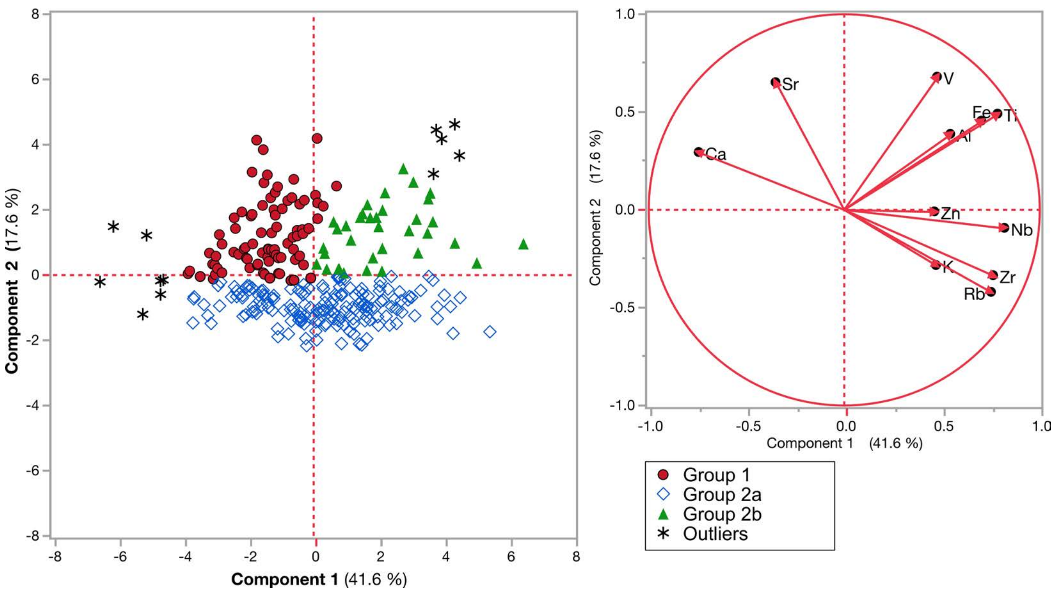

Figure 4: *Result of the principal component analysis of the painted pottery and Hittite pottery groups. Classification according to statistical groups. Group 1: red circles, group 2a: blue diamonds, group 2b: green triangles, and outliers: black stars (graphic: Sonja Behrendt).*

ceramics investigated, various groupings can be differentiated despite the point cloud, which at first glance appears massive (**Figure 4**).

From all 299 Late Bronze Age pottery objects investigated, 287 pieces could be assigned to the two main groups shown in **Figure 4**. Group 1 (red circles) consists of 85 samples (28%). Group 2 (68%) can be divided into subgroup 2a (blue diamonds) with 167 associated samples and subgroup 2b (green triangles) with 35 samples. The remaining 12 samples (4%) could not be grouped due to their different chemical composition and were classified as outliers (black stars). With regard to the signature of the minor and trace elements, group 1 differs, in particular, in the calcium, strontium and zirconium contents (**Figure 5**) compared to group 2 with its subgroups 2a and 2b. The element pattern of group 2a diverges with slightly higher zirconium and rubidium values on average and lower strontium contents. Group 2b is distinguished by slightly higher iron and titanium concentrations.

A significant feature of the geochemical group 1 is the high content of calcium that is more than in the other two groups which also have relatively high calcium values (**Figure 5.a**). A very calcium rich raw material source must be the reason for this. This correlates with the petrographic fabric group 3 of the painted pottery, which is characterised by calcite-rich inclusions (see below). In comparison to the geochemical groups 2a and 2b, group 1 is also distinguished by low zirconium contents and the highest average of strontium (**Figure 5.b**). Generally, the elements zirconium, strontium and rubidium are important geochemical markers. This indicates that the objects of our geochemical group 1 differ from group 2a and 2b in respect of the raw materials used. Group 2a has the highest values for niobium, zirconium, rubidium and potassium (**Figure 5.b**), whereas in group 2b, slightly high values of iron and titanium are noticeable (**Figure 5.a**). With regard to the geochemical markers rubidium, strontium and zirconium, groups 2a and 2b differ insignificantly from each other, but show more significant differences compared to group 1 (**Figure 5.b**). Only a few ceramic objects of group 2b show higher strontium values (**Figure 6**).

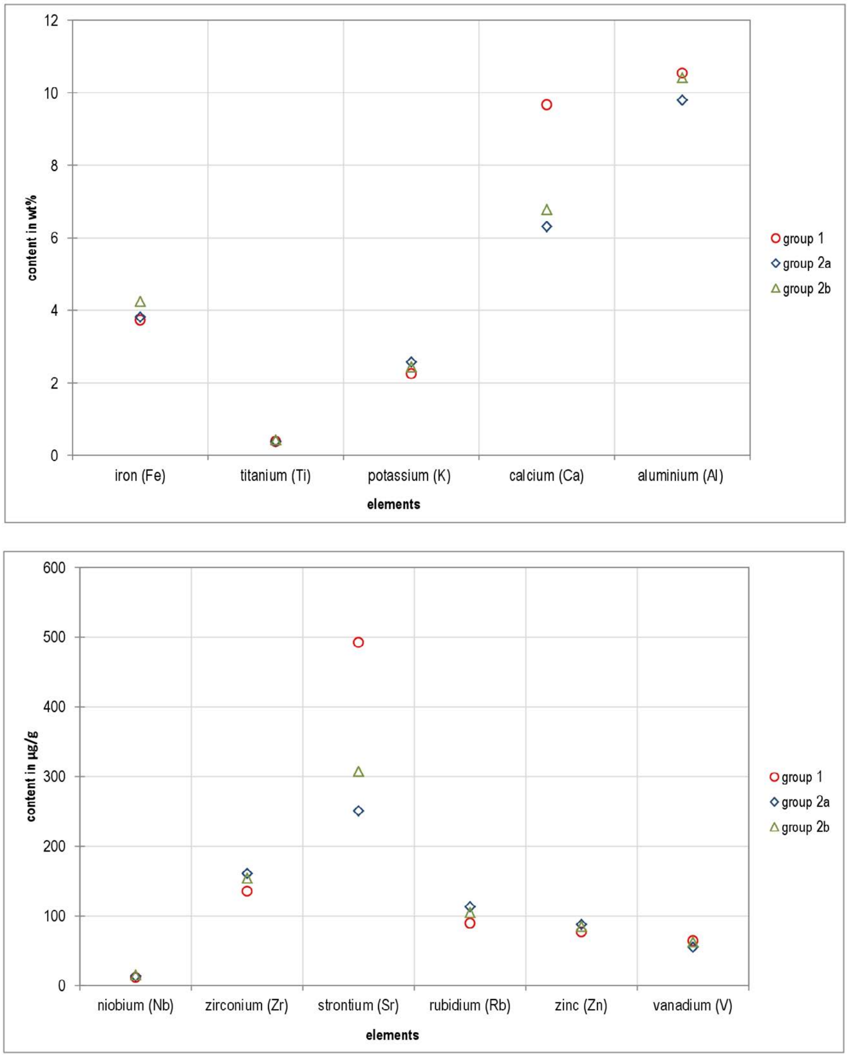

Figure 5: *(a) Element pattern for the minor elements of the individual groups. All average values are given in weight percent (wt%) (graphic: Sonja Behrendt); (b) Element pattern for the trace elements of the individual groups. All average values are given in ppm = µg/g (graphic: Sonja Behrendt).*

If we now include the archaeological information (**Figures 7–8**), we see that the 85 samples of group 1 consist of 61% painted pottery (52 samples) and 39% Hittite pottery (33 samples), the 167 samples of group 2a consist of 74% Hittite pottery (123 samples) and 26% painted pottery (44 samples), and the 35 samples of group 2b consist of 80% painted pottery (28 samples) and 20% Hittite pottery (7 samples). The painted pottery is mainly found in groups 1 and 2b, while Hittite pottery dominates in group 2a. The outliers consist of only one painted and eleven Hittite ceramic samples. From an archaeological point of view, the outliers do not show any special features.

As the results of the chemical classification of the ceramic objects from Oymaağaç Höyük show, the majority of the sherds were made from similar raw material sources. The geochemical subgroups 2a and 2b are especially similar. The geochemical group 1, on the other hand, is somewhat more distinct. However, the evaluation shows that group 1 does not differ much from the other two groups (**Figure 8**). This indicates that although different raw material resources were used, they do not originate from completely geochemically different regions. Thus, a production of both the painted and the Hittite pottery

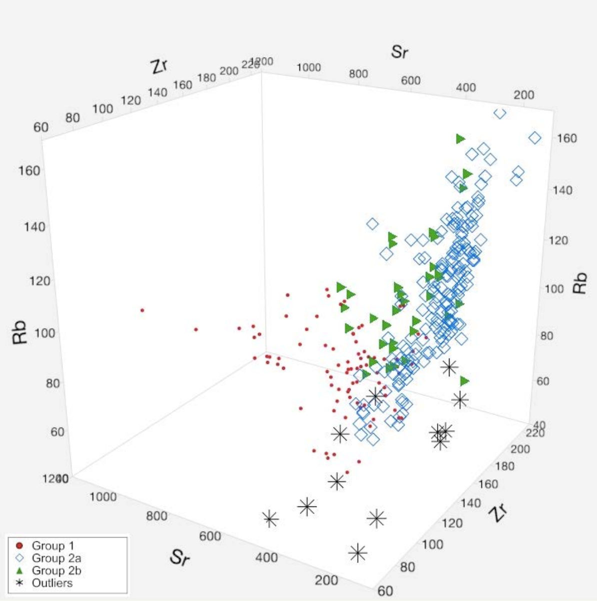

Figure 6: *Rubidium-Strontium-Zirconium scatter plot of group 1 (red circles), 2a (blue diamonds), 2b (green triangles) and the outliers (black stars), showing the most important geochemical markers. Axis values are given in ppm = µg/g (graphic: Sonja Behrendt).*

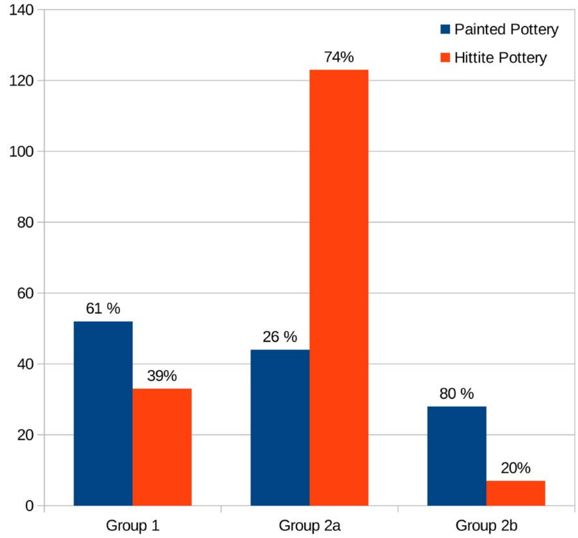

Figure 7: *Statistical distribution of the painted and the Hittite pottery in the geochemical determined groups (graphic: Dirk Paul Mielke).*

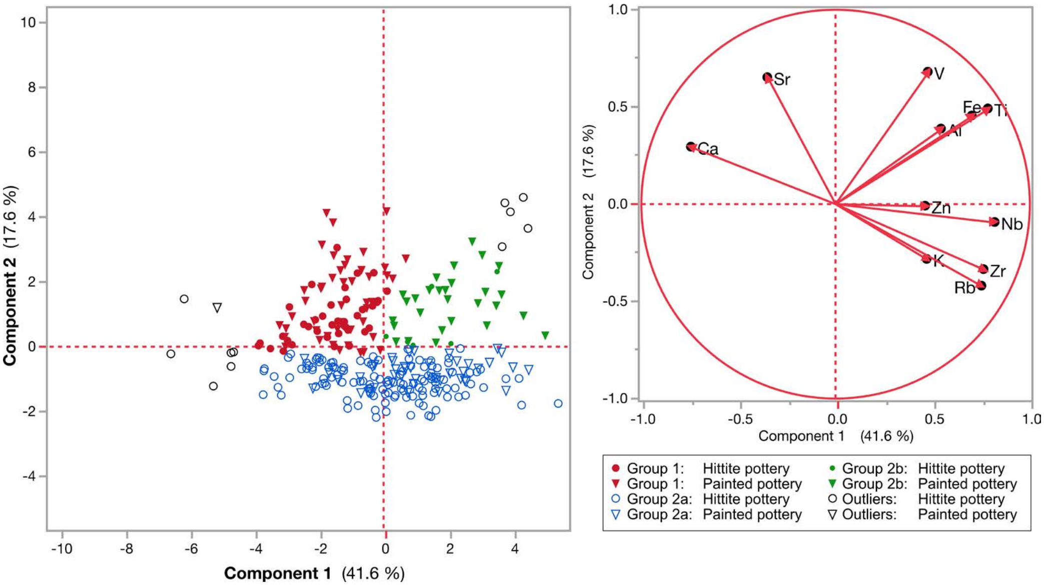

Figure 8: *Result of the principal component analysis of the painted pottery (triangles) and the Hittite pottery (circles) and their distribution in the chemical groups 1 (red symbols), 2a (blue symbols), 2b (green symbols) and outliers (black symbols) (graphic: Sonja Behrendt).*

in one region with diverse surface geology – probably the basin of Vezirköprü and its surroundings – is likely. Furthermore, the painted pottery shows a slightly greater variability in its chemical composition than the Hittite pottery. This suggests that different production conditions for the Late Bronze Age painted pottery and the Hittite pottery existed. Due to the limitations of the portable XRF, which are mainly the reduced number of measurable and evaluable elements in contrast to laboratory methods and the lower measurement precision, no deeper insights from the chemical data at hand are possible.

S. B.

Petrographic analysis

After the first important results of the chemical analysis, the petrographic analysis of selected samples of painted ware and Hittite pottery from Oymaağaç Höyük were conducted to get deeper insights into the character of the Late Bronze Age painted pottery. Petrographic analysis allows us to get information about the material properties, main compositions and clay types used in the production. Our hope was to identify different or similar clay sources applied to the production of the samples and to obtain information on the procurement strategy of the producers. Furthermore, on the base of the main lithotypes contained in the selected samples and their comparison with the geological setting of the site of Oymaağaç Höyük presented in the section on the geographic setting of the site, a broadly defined area could hopefully be suggested as the possible area of the clay sources. Therefore, at first, both pottery groups were analysed separately to gain deeper insights of their specific characteristics. The comparison between the two groups was then carried out in a second step.

Petrographic analysis of Late Bronze Age painted pottery

The 24 painted pottery samples under investigation were manufactured from different clay types, ranging from non-calcareous to the calcareous clays containing angular, sub-angular and rounded rock and mineral fragments in varying sizes, from silt (0.02 mm) to coarse sand-size (2 mm). The paste colour varies from reddish, dark-brown to grey, though the reddish colour is prevalent. Common features observed in most of the samples are the high quality of clay (i.e. fine clay with low silty grains content) and compact appearance of the fabric. Based on the petrographic features such as the type of clay (non-calcareous and calcareous) and rock and mineral inclusions and their frequency, the selected samples of the painted pottery can be divided into five fabric groups (FG) and further subgroups (**Table 1, Figure 9**). Two samples which are not related to any of the identified fabric groups were labelled as outliers. The fabric groups identified within the selected samples suggest the use of different clay sources and differences in the treatment of the clay mass, such as levigation and tempering in the production of the painted ware. The main petrographic characteristics of the groups and subgroups can be described as follows:

Fabric group 1: Of the selected samples, seven sherds share common fabric features, and accordingly, they are clustered into a separate group, fabric group 1 (**Table 1**). The group-specific features are the fine paste with a red, dark-red colour, as well as the low quantity of the visible inclusions and the compact fabrics (**Figure 9.a–b**). The main inclusions are quartz and siltstone/mudstone, as well as a minor amount of micritic limestone (microcrystalline calcite) and metamorphic rock fragments identified as phyllite. Single chert and plagioclase fragments were also observed. The grain size reaches up to 2 mm, but mostly they are made of silt to very fine sand (0.02 to 0.2 mm). Although all samples in this group contain similar inclusions and have a more or less similar matrix, there are some variations, especially the amount of inclusions in some samples are slightly higher, and the grains tend to be bimodal in grain-size distribution. Consequently, they were classified into two subgroups. The subgroup 1a (n=5) is characterized by a low quantity of inclusions, and only single large grains are contained (**Figure 9.a**). The second subgroup 1b, comprises two samples containing higher amounts of coarse grains that show bimodal grain-size distribution (**Figure 9.b**). This may be a result of the tempering of the raw clay in the production or the different distribution of the temper in the individual pottery object.

Fabric group		Oymaağaç-No.	Ware	Met	Ml	Mst	Sst	Vol	Ch	Qz	Pl	Px	Cc	Total
Fabric group 1	Subgroup 1a	7586:85:1:3	GPW (LBA)	1	1		2		1	4	1	1		11
		7488:69:1:1	GPW (LBA)		2	1	3		3	4				13
		7586:69:18	GPW (LBA)	1		1			2	3	1			9
		7785:171:3	GPW (LBA)		1	1	2		2	3				9
		7586:155:1:1	GPW (LBA)			1	3		2	4	1	1		12
	Subgroup 1b	7685:147:1:1	GPW (LBA)	5	4	2	1			3				16
		7586:85:1:2	GPW (LBA)			2	1		1	3	1	1		9
Fabric group 2		7685:94:1:13	GPW (LBA)	1	5	1			1	4	1			14
		7487:15:1:30	GPW (LBA)	1	6	1	1		3	3				15
		7587:51:1:14	GPW (LBA)	4	5	2	1			3				15
		7389:18:1:4	GPW (LBA)	6	6	3	2		2	5				24
Fabric group 3		7484:15:1:6	GPW (LBA)		2		2	2	6	5	2		3	22
		7486:26:1:1	GPW (LBA)		1			2	2	8	1		1	15
		7585:110:1:1	GPW (LBA)	1	2		2	3	1	3	2			14
		7389:37:1:1	GPW (LBA)	1	1	1	3	4	2	7	2		3	24
Fabric group 4	Subgroup 4a	7585:109:1:1	GPW (LBA)	2	8	1			1	3				17
		7586:84:1:1	GPW (LBA)	1	10	1	1		2	5	1			21
		7585:123:1:1	GPW (LBA)	1	8	2	2		2	4	1		1	21
		7483:54:1:18	GPW (EAI)		10	1				1				12
	Subgroup 4b	7785:189:1:1	GPW (LBA)	4	2	1	2		1	3				13
		7785:178:1:1	GPW (LBA)	3	8	2	1		1	3				18
Fabric group 5		7386:6:2:1	GPW (LBA)		7					5	1			13
Outliers 1		7585:118:1:1	GPW (LBA)	1	3	1	2		2	3				12
		7486:35:3:1	GPW (LBA)		15		1		2	7	1	2		28

Table 1: *Petrographic results of selected painted pottery from Oymaağaç Höyük showing inclusion types and petrographic groups. Abbreviations: Met – metamorphic/phyllite, Ml – micritic limestone, Mst – mudstone, Sst – siltstone, Vol – volcanic, Ch – chert, Qz – quartz, Pl – plagioclase, Px – pyroxene, Cc – Calcite (graphic: Mustafa Kibaroğlu).*

Fabric group 2: The second group consists of four sherds (**Table 1**). They show some similarity to the first petrographic group, especially concerning their fine clay fraction, paste colour, and the type of main inclusions such as quartz, micritic limestone and phyllite. However, they contain a higher amount of the micritic limestone and the phyllite inclusions, and overall, the samples contain inclusions in higher quantity (up to 16%) compared to fabric group 1 (**Figure 9.c**). The grains are usually angular-subangular, but some inclusions are well-rounded, especially phyllite grains. The grains show a tendency of bimodal distribution, which can be interpreted as an indication of intentional tempering of the raw clay.

Fabric group 3: A further fabric group identified at Oymaağaç Höyük consist of four sherds (**Table 1**). They are characterized by a higher quantity of inclusions compared to the first group (**Figure 9.d**), with an average grain size of 0.7–1 mm, though single grains reach up to 2 mm. The main inclusions in this group are quartz, mudstone, and chert. A minor amount of phyllite fragments also occur. The group marker is the volcanic fragments that are not contained in other groups. Though the exact lithotype of these fragments was not identified with certainty, they are most probably andesite or basalt. A further characteristic inclusion in this group is calcite, which was also not observed in other groups. Fabric group 3 also contains a slightly higher amount of plagioclase fragments compared to other fabric groups, which seem to be derived from volcanic rocks (e.g. andesite). The grains are angular to sub-angular, few are rounded, and they are presented in varying amounts, reaching up to 24%. The lithotypes of the coarse inclusions in FG 3 suggest that the raw clay of this group was derived from different rock types, such as metamorphic rocks, limestone, mudstone, and volcanic rocks. The selected samples of this group show no consistent common fabric features in contrast to fabric group 1, though samples 7585:110:1:1 and 7486:26:1:1 show some similarities. This diversity is in its fabric (e.g. varied quantity of the inclusions in individual samples). For example, sample 7484:15:1:6 contains a high amount of chert, whereas sample 7585:110:1:1 does not. This suggests that they were not manufactured from a single clay source with the same composition, rather this reflects that the raw clay was collected from stratigraphic different levels or spots within the same sedimentary unit. The question of whether this clay source was only exploited occasionally or, as in the case of the FG 1, consistently, is difficult to answer by means of the samples analysed in this study.

Fabric group 4: The fourth fabric group, identified within the examined painted ware, comprises seven samples. This group shows clear differences to the former groups, characterized by calcareous clay paste, mostly brown-grey to reddish in colour, and presence of micritic limestone in high amounts, up to 10% (**Figure 9.e–f**). Further inclusions are quartz (usually polycrystalline), mudstone/siltstone and fine sandstone, chert and a small amount of phyllite fragments. In terms of the inclusions like quartz (usually polycrystalline), mudstone/siltstone and phyllite, FG 4 shows some similarities to the former groups. However, the calcareous clay type used for this group especially suggests the use of a different clay source for its production.

Fabric group 4 can also be subdivided into further subgroups in terms of the quantity of some inclusions. The first subgroup, FG 4a (n=4), contains slightly higher amounts of micritic limestone, and the clay paste seems to be more calcareous. The second subgroup, FG 4b (n=2), is characterized by coarse inclusions of mudstone/siltstone (**Figure 9.e**), usually occurring as well-rounded grains, and showing clear bimodal grain-size distribution. This suggests that the raw clay was tempered during the production. However, the subgroup 4b shows some variation in grain-size and in the quantities of some inclusions (**Figure 9.f**). This becomes particularly clear in sample 7785:178:1:1, which contains a higher amount of coarse grains with a bimodal distribution. This points to the tempering of the raw clay using mudstone/siltstone-rich sand, obviously river sand, as the well-rounded mudstone grains display. This group contains the only painted pottery sample from the Early Iron Age (7483:54:1:18).

Fabric group 5: One of the analysed samples, sample 7386:6:2:1 is distinguished from other samples in terms of calcareous clay type, and overall fine fabric (**Figure 9.g**). It is characterized by a fine clay matrix with less than 5% serial distributed micritic limestone and polycrystalline quartz, on average less than 0.5 mm in size. Single fine grains of siltstone, chert, and plagioclase were also observed. The calcareous nature of the clay matrix, and the presence of carbonate inclusions, as well as the part of the matrix as small clasts (<silt-size), indicate that this clay was prevalently derived from carbonate rocks. Overall, the clay paste is fine and no large inclusions are present, suggesting that the raw clay was probably purified during the production. Since there is another analysed sample from Oymaağaç Höyük which is not Hittite and not painted, and which fits from an archaeological point of view very well to the analysed painted sample 7386:6:2:1, we decided to classify these two pieces into a group and separate them from the outliers.[16]

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[16] Beside the painted pottery, a non-Hittite Late Bronze Age plain pottery was also detected during the work at Oymaağaç Höyük. This pottery group is very similar to the painted pottery and can be related to this group (cf. Mielke 2019, 81–82).

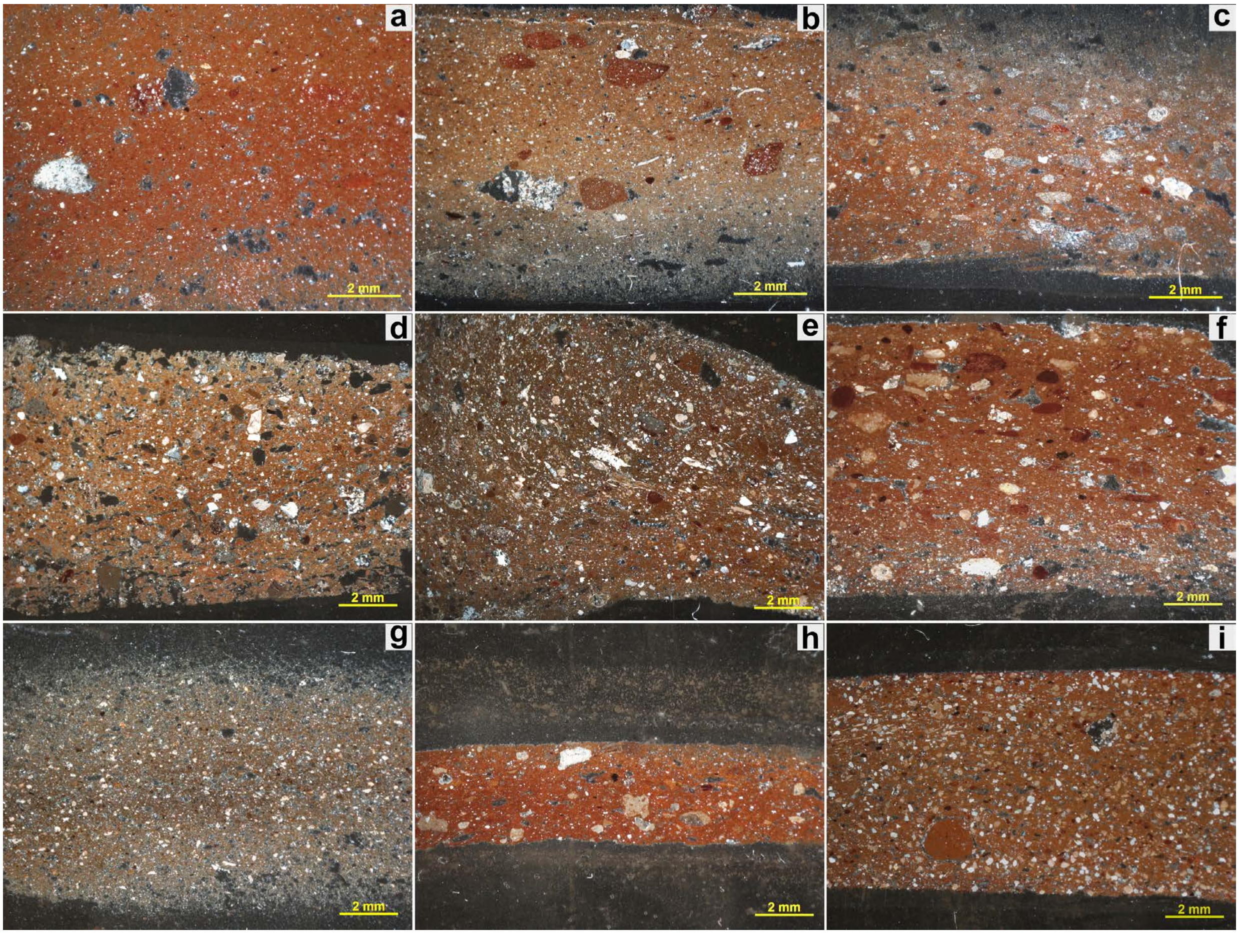

Figure 9: *Thin section photomicrographs of selected samples from main fabric groups and subgroups identified within the painted ware from Oymaağaç Höyük: a – fabric group 1a (sample 7488:69:1:1), b – fabric group 1b (sample 7685:147:1:1), c – fabric group 2 (sample 7587:51:1:14), d – fabric group 3 (sample 7389:37:1:1), e – fabric groups 4a (sample 7586:84:1:1), f – fabric group 4b (sample 7785:178:1:1), g – fabric group 5 (sample 7386:6:2:1), h – outlier (sample 7585:118:1:1), i – outlier (sample 7486:35:3:1). All photomicrographs were taken under cross-polarized light, the magnification is the same for all samples, scale bar is 2 mm (photos: Mustafa Kibaroğlu).*

Outliers 1: Two samples, 7585:118:1:1 and 7486:35:3:1, differ petrographically from the fabric groups described above, so they cannot be assigned to any of these groups. Compared to each other, they also have very different fabrics. The first one, sample 7585:118:1:1 (**Figure 9.h**), is characterized by coarser inclusions compared to sample 7486:35:3:1, on average, 20% in volume. Main inclusions are micritic limestones, quartz, and minor amounts are silt/mudstone, phyllite, and chert. The grains are usually rounded to sub-rounded, showing a bimodal distribution, which suggests the tempering of the clay during its production. It has a compact fabric containing fewer silty-clasts and shows a red paste colour in cross polarized light (XPL). The second outlier, 7486:35:3:1, is characterized by equigranular, well-sorted inclusions (**Figure 9.i**), consisting mainly of quartz and micritic limestone, and a minor amount of mudstone, chert and plagioclase. The presence of micritic limestone in high quantity (15%), also as part of the matrix, indicates that the clay deposit was derived mainly from calcareous rocks. The equigranular distribution of the micritic limestone and quartz (serial grain-size distribution) suggests the levitation of the raw clay during its production. Both outliers show no archaeological peculiarities.

Petrographic analysis of Hittite Late Bronze Age pottery

The following analyses of thin sections from Late Bronze Age Hittite pottery samples are necessary to produce a meaningful evaluation of the painted pottery data by comparison. All in all, 30 samples were selected and analysed. They belong to different ware groups of the Hittite pottery, such as Middle Plain Ware (MPW), Coarse Plain Ware (CPW), Red Slipped Ware (RSW) and Brown Polished Ware (BPW).[17] The Hittite pottery samples analysed in this study show different petrographic features, and were also made from clay types ranging from non-calcareous to the calcareous with inclusions of different rock and mineral fragments in varying sizes, from silt (0.02 mm) to coarse grains, up to 5 mm in size. On the base of the fabric characteristics, two main groups and further subgroups can be distinguished (**Table 2, Figure 10.a–d**). Only one sample shows no petrographic relation to any of the identified fabric groups, and is thus labelled as an outlier. The different fabric groups distinguished in this study suggest the use of different clay sources for the production of the selected Hittite pottery. The main petrographic characteristics of the groups and subgroups can be described as follows:

Fabric group 6: Two samples, a plain small cup (7585:243:3) and a red slipped bowl (7586:85:1:64) show very similar fabric, and are clustered into a separate group, fabric group 6 (**Table 2**). The group-specific features are the coarse fabric with a red, dark-brown paste colour, and the high amount of inclusions, up to 31%. The main inclusions are metamorphic rock fragments identified as phyllite, quartz, mudstone/siltstone, and sandstone (**Figure 10.a, Table 2**). In minor amounts, there is also chert and plagioclase. The grain size reaches up to 5 mm, and the metamorphic inclusions are well-rounded. The inclusions show bimodal distribution in the matrix. Considering the inclusion type, such as the high amount of metamorphic rock and polycrystalline quartz, which are also present in the matrix, and the absence of carbonate components, it is indicated that the raw clay was prevalently derived from metamorphic rocks such as phyllite. Further, the bimodal grain size distribution and its well-rounded grains show that the raw clay was tempered in the production, most probably using river sand.

Fabric group 7: The majority of the Late Bronze Age Hittite ceramic samples (n=27) considered in this study show similar fabric features regarding the type of clay and main inclusions. They are characterized by a high amount of carbonate inclusions (micrites) and the calcareous nature of the raw clay. Main inclusions are fine-grained metamorphic rocks, identified as phyllite, micritic limestone, mudstone/siltstone, sandstone and quartz. In minor amounts, there are also chert fragments. Single grains of plagioclase, calcite and shell fragments were also observed. The grains are usually rounded or sub-rounded. Overall, the main inclusions show a bimodal grain-size distribution, suggesting that the raw clay was tempered by carbonate and metamorphic rich sand. Unlike fabric group 6, the raw materials of fabric group 7 were derived mainly from carbonate rock, though metamorphic rock was also source rock of the clay deposit to a limited extent. Though all samples of fabric group 7 contain more or less similar inclusions and show a compact paste with similar colours ranging from red to brown to grey, they can be divided into two subgroups on the base of the amount of the main inclusions. The first subgroup 7a (n=14) (**Figure 10.b, Table 2**) contains slightly higher inclusions, varying from 14 to 24%, while the subgroup 7b (n=13) (**Figure 10.c, Table 2**) contains lower inclusions, ranging from 10 to 17%. The subgroup 7b can be seen as the granulometric continuation of subgroup 7a, obviously a result of a different tempering grade in the paste preparation processes.

Outliers 2: Sample 7586:85:1:445, a red slipped bottom of a bowl, has a different fabric compared to the other fabric groups, characterized by a fine, compact past with minor inclusions (**Figure 10.d**) of micrits and quartz fragments. The fine fabric and very few inclusions suggest the purification of the raw clay during production.

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[17] For the different Hittite pottery wares cf. Mielke 2016; 2017.

Fabric group		Oymaağaç-No.	Ware	Met	Ml	Mst	Sst	Fsl	Ch	Qz	Pl	Px	Cc	Total
Fabric group 6		7585:243:3	Hittite MPW	15		4	3		2	7				31
		7586:85:1:64	Hittite RSW	14		3	2		2	4	1			26
Fabric group 7	Subgroup 7a	7487:1:1:76	Hittite MPW	8	3	4	3	1		4				23
		7585:166:1:111	Hittite MPW	6	4	1	2		4	3				20
		7586:85:1:556	Hittite CPW	6	4	2	3	1	1	3				20
		7487:54:1:11	Hittite MPW	4	4	6	2			3	1			20
		7585:132:1:8	Hittite MPW	6	1	2	3	1	1	3				17
		7586:85:1:347	Hittite MPW	7	2	1	1		2	3			1	17
		7685:237:5	Hittite MPW	4	2	3	4		2	4				19
		7586:85:1:319	Hittite MPW	6	3	2	3			3				17
		7586:85:1:128	Hittite RSW	6	2	1	2		1	3				15
		7586:85:1:474	Hittite MPW	8	3	2	2	1	2	6				24
		7586:85:1:502	Hittite CPW	4	2	8	4		2	3				23
		7586:85:1:300	Hittite BPW	6	3	1	3		3	3				19
		7487:65:1:23	Hittite RSW	5	6	3	2			4	1			21
		7586:85:1:272	Hittite MPW	8	3	2	3		1	3			1	21
	Subgroup 7b	7586:85:1:187	Hittite MPW	4	4	1	2	1	2	3				17
		7586:85:1:284	Hittite MPW	7	3	1	2			3				16
		7586:85:1:271	Hittite CPW	3	2	2	3		1	4				15
		7586:85:1:117	Hittite MPW	6	5	1	1		1	3				17
		7586:85:1:124	Hittite RSW	4	2	2	4							12
		7487:54:1:3	Hittite MPW	2	8	3	1		1	3				15
		7586:85:1:145	Hittite MPW	3	5	1	2		1	3				17
		7487:42:1:15	Hittite RSW	2	5	2	2		2	4				17
		7585:237:9	Hittite MPW	2	3	4				3				12
		7586:85:1:380	Hittite MPW	3	2	1			1	3				10
		7586:85:1:72	Hittite MPW	6	3	1	1		2	3				16
		7487:54:1:14	Hittite RSW	1	8		1		1	5				16
		7487:19:1:4	Hittite CPW	3	3	1	3		1	3				14
Outlier 2		7586:85:1:445	Hittite RSW		2		2			3	1			8

Table 2: *Petrographic results of selected Late Bronze Age Hittite pottery from Oymaağaç Höyük showing inclusion types and petrographic groups. Abbreviations: Met – metamorphic/phyllite, Ml – micritic limestone, Mst – mudstone, Sst – siltstone, Vol – volcanic, Ch – chert, Qz – quartz, Pl – plagioclase, Px – pyroxene, Cc Calcite (graphic: Mustafa Kibaroğlu).*

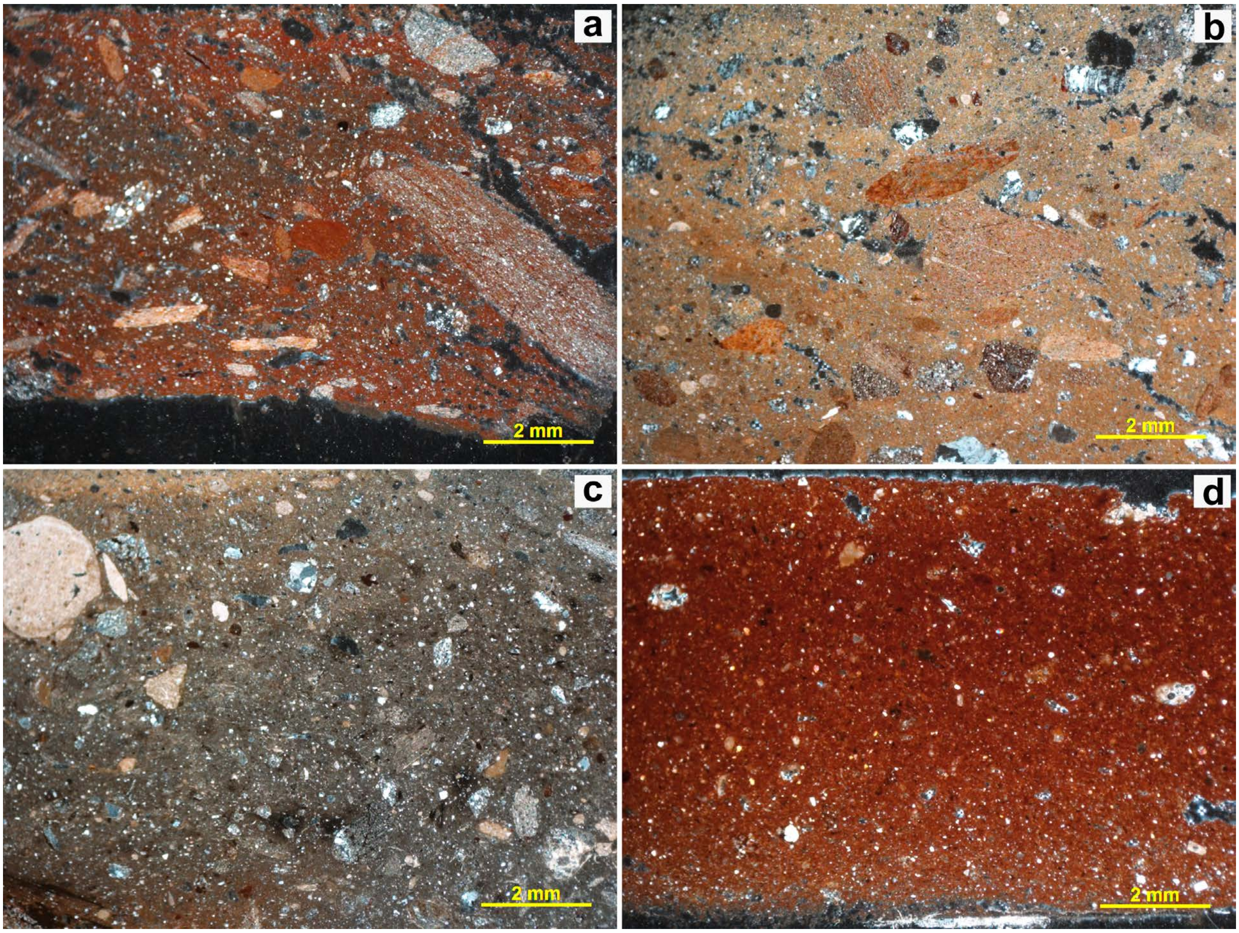

Figure 10: *Thin section photomicrographs of selected samples from main fabric groups and subgroups identified within the Late Bronze Age Hittite pottery samples from Oymaağaç Höyük: a – fabric group 6 (sample 7586:85:1:64), b – fabric group 7a (sample 7487:1:1:76), c – fabric group 7b (sample 586:85:1:117), d – outlier (sample 7586:85:1:445). All photomicrographs were taken under cross-polarized light, the magnification is the same for all samples, scale bar is 2 mm (photos: Mustafa Kibaroğlu).*

Firing temperature

The petrographic analysis further allows a broad estimation of the firing temperature of the ceramics analysed in this work. From petrographic data alone, the exact firing temperature is difficult to determine, as the mineral durability of carbonate depends on various factors, such as grain-size, heating time, and firing atmosphere; however, the presence of carbonate fragments suggests that the firing temperature for painted ware and Hittite pottery would have been around 750–850 °C, the durability temperature interval of calcite.[18]

M. K.

Discussion of the petrographic analysis

The results of the petrographic analysis presented above reveal that in the production of the painted and the Hittite pottery different clay sources with different clay types, ranging from non-calcareous to calcareous, were used, and that the raw material was carefully processed by purifying or tempering.

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[18] Cultrone *et al.* 2001; Riccardi *et al.* 1999; Maggetti 1982.

The Late Bronze Age painted pottery was mainly produced from non-calcareous clays and shows overall a great variability in the raw material used. This may indicate a non-centralized manufacture of the painted ware, probably produced in different workshops. In contrast, the Hittite pottery which encompasses different archaeological ware groups like Plain Ware and Red Slipped Ware was produced prevalently from calcareous clay, probably collected from a similar location or clay deposit. However, non-calcareous clay was also used to a limited extent, as shown by fabric group 6. Except for the outlier sample 7586:85:1:445, which was the result of a purification of the raw clay, all Hittite pottery analysed in this study were tempered by metamorphic rock and carbonate-rich temper.

Comparing the petrographic characteristics of the painted ware with the Hittite pottery, we observed that the fabric group 4 of the painted ware shows similarities to the fabric group 7 of the Hittite pottery – in particular, to subgroup 7b, in which both are made from carbonate-rich clay with micritic and metamorphic rock inclusions. Fine-grained metamorphic rock fragments of phyllite included in both ware groups (painted and Hittite pottery) especially point to the use of raw clay from a common source of a sedimentary deposit.

The lithotypes such as phyllite, micritic limestone, and, to some extent, mudstone and siltstone, as well as the volcanic fragments observed in both pottery groups, give further information about the hinterland geology of the catchment of the clay deposits used for the production, and allow us to assign the possible provenance of clay sources to a broadly defined area. The clay deposits were derived mainly from metamorphic rock, limestone, and, to some extent, mudstone/siltstone and volcanic rock and consequently, such rocks should be exposed within the area of the drainage network of the clay deposits used for ceramic production. When this hypothetical geology is compared with the surrounding area of Oymaağaç Höyük, where cretaceous metamorphic rock belonging to the Central Pontide Metamorphic Supercomplex (CPMS) and limestones of different age are exposed (**Figure 3**), there is considerable correspondence. This suggests a local origin of the raw materials used for both pottery groups. Because of the lack of clay samples collected systematically throughout the Vezirköprü basin and its surroundings, a more exact assignment of the clay materials used (petrographic groups) is difficult. Nevertheless, considering the geology of the surrounding area described in the section on the geological setting of the site and the drainage system of the basin deposits in Oymaağaç, as well as the sedimentation processes, one can broadly expect raw materials with different compositions, especially calcareous and non-calcareous clays, to have been available in a certain area within the basin. In case of phyllite inclusions, which can be considered a diagnostic lithotype, the non-calcareous clays and clays with a low calcareous component mainly derived from phyllite rocks are more likely to occur in the north and north-west of the basin, where such rocks are more widely exposed (**Figure 3**). Consequently, it is likely that the non-calcareous clays for the painted ware and for two samples of Hittite pottery (petrographic group 6) originate from this area. However, more precise identification of the source area was not possible due to the lack of reference of local clay samples. Furthermore, the number of analysed samples is low, so the statements given here are to be considered with appropriate reservations.

M. K.

Pigment analyses

In addition to the petrographic and chemical analyses, six samples were selected for pigment analysis of the painting via Raman spectroscopy.[19] In general, the painted decorations of the Late Bronze Age painted pottery are of a red, reddish-brown colour (**Figure 1.1–2**), which is the most common hue for the painted decoration. However, other samples show a dark-brown coloured paint (**Figure 1.3–4**), which is less frequent. The mineralogical analysis through Raman spectroscopy was carried out directly on the painting layers of the ceramic surface (**Figure 11**). The results of the measurements revealed two different colouring phases producing red and dark brown/black painting colour of the surface decorations. Haematite is the main component of the pigment identified at the surface decoration of all selected samples. However, another pigment mineral was also identified. Sample 7487:15:1:30 and sample 7785:171:3 (**Figure 11.a**) show practically pure haematite (Fe_2O_3), but samples 7586:85:1:3 (**Figure 11.b**) and 7586:85:1:2 also contain manganese-based pigments that are a mixture of manganosite (MnO) and hausmannite (Mn_2O_4), producing the dark brown/black colour. Iron-based pigments, in this case haematite, are transformed to red colour in an oxidizing atmosphere, whereas the dark brown/black colour of the manganese-based pigment is independent of the firing atmosphere and produces dark colour. The red pigments used for decoration of the Late Bronze Age painted pottery were possibly obtained by strong levitation of illite clay. Furthermore, the potters also used manganese-based pigments. Most probably they intentionally mixed manganese-based pigments into the iron rich illite ingredients to create a dark brown/black colour without firing in reducing atmosphere.

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[19] In detail these are the Oymaağaç find numbers 7586:85:1:3, 7487:15:1:30, 7585:118:1:1, 7586:85:1:2, 7586:69:18 and 7785:171:3.

T. V. and M. K.

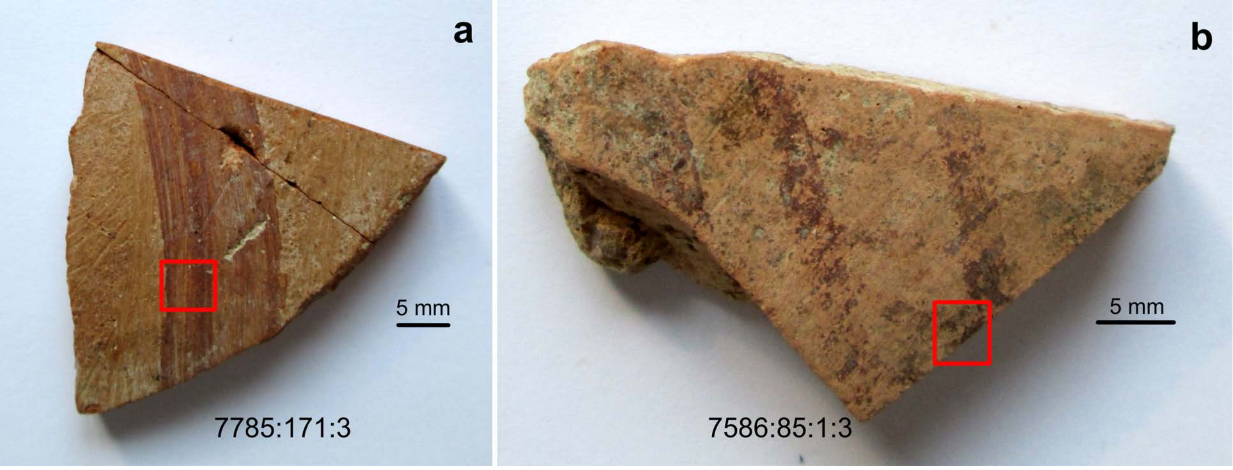

Figure 11: *Examples of Late Bronze Age painted pottery selected for pigment analyses using Raman spectroscopy: a – sample 7785:171:3, b – sample 7586:85:1:3 (graphic: Mustafa Kibaroğlu and Tillmann Viefhaus).*

Conclusion and historical interpretation

The archaeometric investigations of the Late Bronze Age painted pottery from Oymaağaç Höyük via chemical analysis, petrographic thin section analysis and Raman spectroscopy were conducted to answer questions of its production technique and provenance. Although a large number of samples could be examined with the portable XRF for their chemical composition, the results are methodologically limited. Petrographic analysis, on the other hand, allows much more in-depth insight, but this information is limited by the comparatively small number of samples. Nevertheless, through a detailed evaluation in close cooperation with the archaeological information, outstanding new insights about the Late Bronze Age painted pottery could be gained. When interpreting the archaeometric analyses, it must be kept in mind that the pottery under study comprises a regional production and development span of about 300 to 400 years (ca. 16th to 13th century BC). Furthermore, for the interpretation of the results, it is important to point out that the chemical and petrographic analyses used for the investigation represent different methods which produce different results. However, although the used methods cannot produce exactly the same results, the same tendencies within the material became evident. In addition to the

Oymaağaç-No.	Ware	Chemical Group	Petrographic Group
7685:147:1:1	LBA GPW	1	1
7484:15:1:6	LBA GPW	1	3
7585:110:1:1	LBA GPW	1	3
7389:37:1:1	LBA GPW	1	3
7486:35:3:1	LBA GPW	1	Outlier
7487:1:1:76	Hittite MPW	1	7
7586:85:1:556	Hittite CPW	1	7
7487:42:1:15	Hittite RSW	1	7
7785:171:3	LBA GPW	2a	1
7586:155:1:1	LBA GPW	2a	1
7585:123:1:1	LBA GPW	2a	4
7785:178:1:1	LBA GPW	2a	4
7585:166:1:111	Hittite MPW	2a	7
7586:85:1:128	Hittite RSW	2a	7
7586:85:1:300	Hittite BPW	2a	7
7487:65:1:23	Hittite RSW	2a	7
7586:85:1:284	Hittite MPW	2a	7
7586:85:1:117	Hittite MPW	2a	7
7586:85:1:145	Hittite MPW	2a	7
7487:19:1:4	Hittite CPW	2a	7
7586:84:1:1	LBA GPW	2b	4
7585:109:1:1	LBA GPW	2b	4
7785:189:1:1	LBA GPW	2b	4
7386:6:2:1	LBA GPW	2b	5
7586:85:1:319	Hittite MPW	Outlier	7
7586:85:1:347	Hittite MPW	Outlier	7

Table 3: *Samples which were analysed with both analytical methods and their grouping (graphic: Dirk Paul Mielke).*

results of the chemical and petrographic analysis separately presented above, this is clearly observable by the comparison of the grouping of the samples that were examined using both methods (**Table 3**).

The most important result from chemical and petrographic analysis is the fact that both the painted and the Hittite Late Bronze Age pottery groups can be traced back to similar raw material sources. The petrographic analysis demonstrated that the clay sources of both pottery groups can be assigned broadly to the geological areas in the surroundings of the basin of Vezirköprü, in which the site of Oymaağaç Höyük is located (**Figure 3**). Moreover, there are indications that differences existed concerning the use of the regional raw material sources for painted pottery and Hittite pottery. It seems that the clay sources for the painted pottery are mainly located to the north and north-west of the site of Oymaağaç Höyük, close to the course of the Kızılırmak river. If we now take into account that the Late Bronze Age painted pottery can be connected to the so-called Kaška people, who were resident in the Black Sea Region, according to the Hittite written sources, and who sometimes acted with, but mostly against the Hittites, it is very likely that the Kızılırmak was an important regional border in the Hittite-Kaška relationship.[20] Therefore, the archaeometric results might be a reflection of different settlement areas of the Hittites and Kaška people.

Other important results of the archaeometric work conducted are connected with the production techniques. As the archaeological data clearly demonstrate, the painted pottery represents a high-quality wheel-made ware. The archaeometric data also confirm that both the Hittite and the painted pottery are very similar in that respect and must be understood as results of a highly developed production. A careful selection of raw materials and their preparation by purification and tempering is evident from all analysed samples. In addition, a high knowledge of the firing processes which were conducted in an oxidizing atmosphere at a temperature interval between 750 and 850 °C is visible. The deliberate use of manganese pigment for the production of the paint, behind which a specialized knowledge becomes visible, also demonstrates that the painted pottery represents a high quality professional product. Therefore, it is likely that the painted pottery was produced by professional or semi-professional workshops with a high standardised *chaîne opératoire*. A household production can be excluded for both pottery groups.

In the course of the investigations one sample of the Early Iron Age painted pottery from Oymaağaç Höyük was also analysed via petrographic thin section method (7483:54:1:18). In contrast to the Late Bronze Age examples, this pottery is handmade and can be dated to the late phase of the Early Iron Age (10th and first half of the 9th century BC). Despite the technological differences and the chronological gap, this kind of pottery stands clearly in the tradition of the Late Bronze Age painted pottery and represents its successors.[21] Without difficulty, this sample can be grouped together with the Late Bronze Age pieces in petrographic fabric group 4, which shows the continuity of a regional production into the Early Iron Age. However, one sample is not sufficient to provide more detailed information about long term traditions or even differences in production.

Although the Late Bronze Age painted ware has a homogeneous appearance from a macroscopic point of view, the archaeometric analyses have brought to light a remarkable variability in the use of raw material sources. This is particularly noteworthy regarding the fact that the painted pottery has a limited vessel spectrum, consisting of jugs, jars, bowls and pots (i.e. forms which together can be characterised as serving vessels – maybe used for feasting activities).[22] This stands in striking contrast to the analysed Hittite pottery which encompasses a broad vessel spectrum and – more importantly – a broad spectrum of archaeological ware groups, like the dominating plain wares with its coarse, middle subgroups, but also samples of the special red slipped and brown polished ware. Despite these broad variations concerning forms and archaeological wares, the Hittite pottery shows a much more limited spectrum of raw materials used. This observation fits very well with the theory of a highly centralized organisation of pottery production in the Hittite world.[23] The outliers of the chemical analysis, which are mostly Hittite pottery samples, might also be explained as a result of an organized distribution of pottery. In contrast, the organisation of the production of the painted pottery seems to be more diverse and not centralized. In spite of the methodological and quantitative restrictions of the different analysis methods used, the archaeometric investigations of Late Bronze Age Painted Pottery from Oymaağaç Höyük/Nerik have revealed new and important insights into its production technique and provenance. The results are an important pillar for the assessment of the historical significance of this previously unknown group of painted pottery which existed alongside the Hittite pottery during the Late Bronze Age.

D. P. M.

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[20] For the connection of the Late Bronze Age painted pottery with the so-called Kaška people cf. the contribution of D.P. Mielke in this volume.

[21] For the archaeological background of the Early Iron Age painted pottery cf. the contribution of D.P. Mielke in this volume.

[22] For the forms of the Late Bronze Age painted pottery cf. the contribution of D.P. Mielke in this volume.

[23] Mielke 2016; 2017.

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The Painted Pottery Tradition in Inland South-Western Anatolia during the Late Bronze Age

Fulya Dedeoğlu and Erim Konakçı

Abstract

Pottery decorated with brown, red or black painting over Gold Wash Ware has been attested with variable frequency in the archaeological contexts of the 2nd millennium BC settlements of Inland South-Western Anatolia. This painting tradition starts at the beginning of the 16th century BC and lasts until the 11th century BC. It was first recognized during the excavations at Beycesultan Höyük started by S. Lloyd and J. Mellaart between 1954–1959 and continued to be identified, although in limited number, during the investigations resumed here by E. Abay. Other settlements in the region that reveal a great wealth of these finds are Aphrodisias and Laodikeia Asopos Tepesi. The fact that painted pottery has been attested, even in various frequencies, in all the main Late Bronze Age settlements in Inland South-Western Anatolia indicates that this tradition was one of the characteristic elements of this region.

Keywords

Painted pottery, Inland South-Western Anatolia, Meander basin, Late Bronze Age, Beycesultan Höyük

Özet

Güneybatı Anadolu'da MÖ. 2. binyıla tarihlenen yerleşimlerde bulunan seramiklerde değişen oranlarda Altın Boya Astar üzerine kahverengi, kırmızı veya siyah renkte boya bezeme görülmektedir. Bu boya bezeme geleneği, MÖ 16. yy'da ortaya çıkmış ve MÖ 11. yy'a kadar görülmeye devam etmiştir. Söz konusu seramik grubu ilk olarak 1954–1959 yılları arasında J. Mellaart ve S. Lloyd tarafından yürütülen Beycesultan kazılarında bulunmuştur. Bu seramikler daha sonra E. Abay tarafından yeniden başlatılan Beycesultan kazı çalışmalarında da oldukça az sayıda da olsa bulunmaya devam etmiştir. Bölgede kazı çalışmaları ile incelenen diğer yerleşimler olan Aphrodisias ve Laodikeia Asopos Tepesi'nde ise bu seramik grubu çok daha yoğun bir oranda görülmektedir. Söz konusu seramikler Güney Batı Anadolu'da kazı çalışmaları ile incelenen tüm yerleşimlerde farklı oranlarda da olsa görülmesi bu geleneğin bölgenin Geç Tunç Çağı'nın karakteristik özelliklerinden biri olduğunu ortaya koymaktadır.

Anahtar Kelimeler

Boyalı seramik, İç Güney-Batı Anadolu, Menderes Havzası, Geç Tunç Çağı, Beycesultan Höyük

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 81–98

Introduction

It is known that Inland Western Anatolia, which forms the geographical focus of this work, had an extremely organized political structure from the beginning of the Middle Bronze Age. Hittite sources mention the existence of 'Arzawa' to the west of the central region of the Hittite State. However, it is ambiguous whether the name of 'Arzawa' corresponds to only a geographical area, to a confederation or to a political unit with occasionally shifting borders. In any case, it is clear that this was socio-economically well-organized enough to sometimes compete with the Hittite State and the term 'the Land of Arzawa' was used to politically identify the whole region in the Hittite texts.[1] In this context, many Middle and Late Bronze Age settlements have been excavated in the Upper Meander basin, which is located at the borders of the 'Land of Arzawa', showing culturally homogeneous characteristics.[2]

It might be said that the material culture of the Late Bronze Age in Inland South-Western Anatolia generally belongs to a homogeneous tradition, even though it reveals chronological differences. It has been understood that the ceramic traditions seen at the end of the Early Bronze Age have been considerably preserved in the Middle Bronze Age and that the same pottery shapes and surface colours were still dominant during the Late Bronze Age. In this region, where a cultural interaction is attested with Central Anatolia rather than with coastal Aegean, it should be noted that the Minoan or Mycenaean pottery has not been found at any settlement aside from some exceptional sherds.

On the other hand, we know that local painted pottery characterized especially the coastal part of Western Anatolia from the beginning of the 2nd millennium BC and that this tradition was represented by a consistent group in the Inland South-Western region from the beginning of the 16th century BC. This pottery is marked by red, brown or black painted decorations on Gold Wash Ware (**Figures 3–8**, and see **Catalogue**). It was first discovered at Beycesultan Höyük and Aphrodisias and later found at Laodikeia Asopos Tepesi and Kaymakçı Höyük.[3] We think that this group of pottery, incorrectly interpreted as 'Mycenaean Imitation',[4] actually represents a local tradition in South-Western Anatolia and should be chronologically defined as one of the elements that characterizes the Late Bronze Age in the region. Throughout this paper, we will discuss the stratigraphic and chronological context of this painted pottery discovered at the settlements of the research region.

Geography and key sites

The Meander basin (**Figure 1**) can be geographically divided into the three areas: upper, middle and lower. These can also be clustered into two cultural regions: the Upper and the Lower Meander. The Middle and Upper Meander basin include the valleys of Dandalas and Akçay and the plains of Buldan, Denizli, Baklan and Çivril. Also the region from Denizli, at the end of the plain of Çivril, has been accepted as belonging to the Upper Meander basin. The Middle and Upper Meander basin is a natural route connecting Central and Western Anatolia. The northern/north-eastern side of the basin is opened to Uşak and Afyon, whereas its eastern side is connected to the Lake District and its western side opened to the Aegean shore. The Upper Meander basin was used in the east-west direction for both trade and military purposes, not only during the Late Bronze but also before and after. The Hellenistic, Roman, Seljukian and Ottoman settlements found throughout the region indicate that this natural route did not lose its significance at any period of history.[5] The settlements in which local painted pottery was found

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[1] Garstang and Gurney 1959, 75; Heinhold-Krahmer 1977; Hawkins 1998, 1–31.

[2] Dedeoğlu 2008, 592–593; 2009, 241–256; Abay 2011, 26–28.

[3] Roosevelt *et al.* 2018, Fig. 7.

[4] Lloyd and Melaart 1955, 80–81; Marchese 1978, 15.

[5] Demirkent 2002; Thonemann 2011.

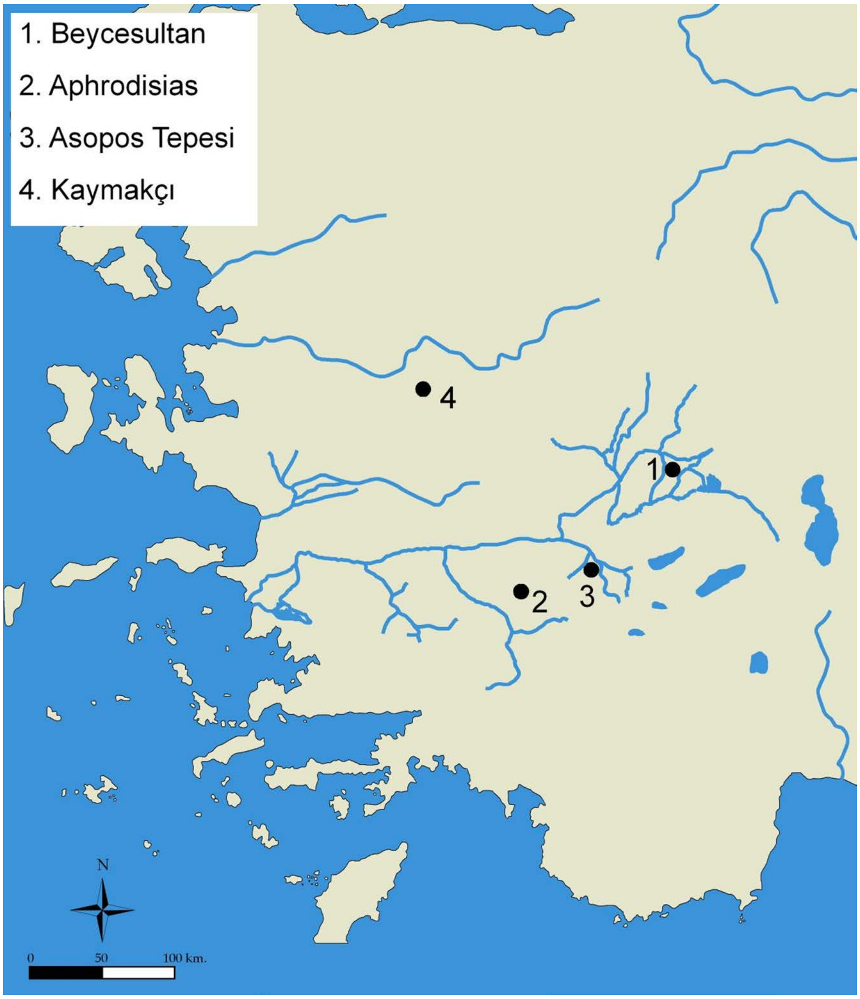

Figure 1: *Late Bronze Age sites with South-Western Anatolian painted pottery.*

in this region are Beycesultan, Aphrodisias and the Laodikeia Asopos Tepesi, all located in the Middle and Upper Meander Basin (**Figure 1**).

Beycesultan is located approximately 100 km north-east of Denizli province at the borders of the villages of Menteş and Kocakaya in the south-west of the Çivril district. The settlement is situated in a wide valley formed by the plains of Baklan and Çivril and surrounded by Mount Burgaz and Akdağ in the north, Mount Bozdağ in the east, Mount Beşparmak in the south and east, and Mount Çökelez in the west. The first excavations at the mound, which has a double cone shape, were carried out by J. Mellaart and S. Lloyd during 6 campaigns between 1954 and 1959. The second round of excavations of the settlement was begun by E. Abay in 2007 and still continues.[6]

The Laodikeia Asopos Tepesi is also situated at the borders of the districts of Eskihisar, Bozburun and Goncalı. The settlement is located on a natural hill in the Lycos valley between the Babadağ and Karcı Mounts (west), the Çökelez Mount (east) and the Honaz Mount (south). The excavations at Asopos Tepesi were carried out by C. Şimşek between 2007 and 2012.[7]

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[6] Dedeoğlu and Abay 2014, 2.

[7] Şimşek and Konakçı 2013.

Aphrodisias is located in the valley of Dandalas (Morsynos/Orsinos) along the Meander river at the borders of the Aydın province. The excavations started by K.T. Erim in 1961 have been carried out by R.R. Smith since 1992. The Middle Bronze Age and Late Bronze Age levels have been excavated at Aphrodisias at Pekmeztepe and the Acropolis areas, at the distance of 100 m from each other, between 1967 and 1972.[8] Here the largest problems are that the remains of the Roman and Byzantine periods considerably destroyed the prehistoric levels and reliable architectural contexts could not be reached except in limited areas. Thus only a small sector has been excavated compared to the larger areas investigated at Beycesultan.[9] Moreover, since the excavations were carried out in areas not connected to each other, it is not possible to establish a comprehensive stratigraphy of the 2nd millennium BC at the settlement.[10]

Alongside the three above mentioned excavations, the surveys that J. Mellaart carried out in Southern Anatolia in 1950s and the surveys later conducted by E. Abay and ourselves have proved that the region represents a homogeneous cultural unit from the Neolithic period.[11]

The painted pottery tradition in Inner South-Western Anatolia

Local painted potteries are attested in Inner South-Western Anatolia from the beginning of the 16th century BC. This might be defined as an early stage of the Late Bronze Age. This pottery tradition increased quantitatively until the end of the Late Bronze Age. During the Early Iron Age this tradition also continues, even though it decreases quantitatively.[12]

In analysing the material culture of the settlements of Inland South-Western Anatolia during the Late Bronze Age, we find some significant differences between an ‘Early Phase’ and a ‘Late Phase’. Whereas these phases are characterized at Beycesultan by continuity in their architectural elements and material culture, there is trace of an ‘Early Phase’ at Asopos Tepesi and Aphrodisias.

The ‘Early Phase’ of the Late Bronze Age corresponds to Level II–Ib (respectively Level 5b and 5a according to the new stratigraphy) at Beycesultan and approximately dated to the 16th and 15th century BC. The larger amount of pottery found at this level belongs to Red-Brown or Red Wares. In addition, Brown Surfaced Ware, Silver Wash Ware, Light Brown or Buff Surfaced Ware and Grey-Black Mottled Surfaced Ware are also attested. Local painted pottery has also been found, although it is limited. These specimens are the earliest examples of this tradition in Inland South-Western Anatolia.[13] J. Mellaart and A. Murray state that this tradition first appeared at the earliest in Level II/5b at Beycesultan and increased especially in the latest Level Ib/5a.[14] Indeed, in Level II/5b, this is only represented by a group of six sherds belonging to one globular pot. A body sherd belonging to this pot was actually dated to Level II/5b in the 1955 publication,[15] but a year later the authors stated that it should have been dated to Level Ib/5a.[16] In the publication of J. Mellaart and A. Murray of 1995, this sherd was ascribed to Level II/5b, interestingly referencing the 1955 publication.[17] The new excavations at Beycesultan have allowed the investigation of Level II/5b over a wide area but interestingly no painted pottery has been found, supporting the hypothesis that the above mentioned specimens belong to Level Ib/5a.

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[8] Joukowsky 1986, 35; 1991, 9.

[9] Joukowsky 1986, 173.

[10] Joukowsky 1986, 476, Tab. 139; Marchese 1976, 413.

[11] Mellaart 1954, 175; Abay 2011, 1; Abay and Dedeoğlu 2005, 41; 2007, 277; Dedeoğlu 2010; Dedeoğlu *et al*. 2015, 151; 2016, 553.

[12] Dedeoğlu and Konakçı 2015, 197.

[13] Mellaart and Murray 1995, 74, Fig. P.38. 6–8, 11.

[14] Mellaart and Murray 1995, 22, 57; Dedeoğlu and Abay 2014, 2, 39.

[15] Lloyd and Mellaart 1955, 80, Fig. 18.14.

[16] Lloyd and Mellaart 1956, 135.

[17] Mellaart and Murray 1995, 22.

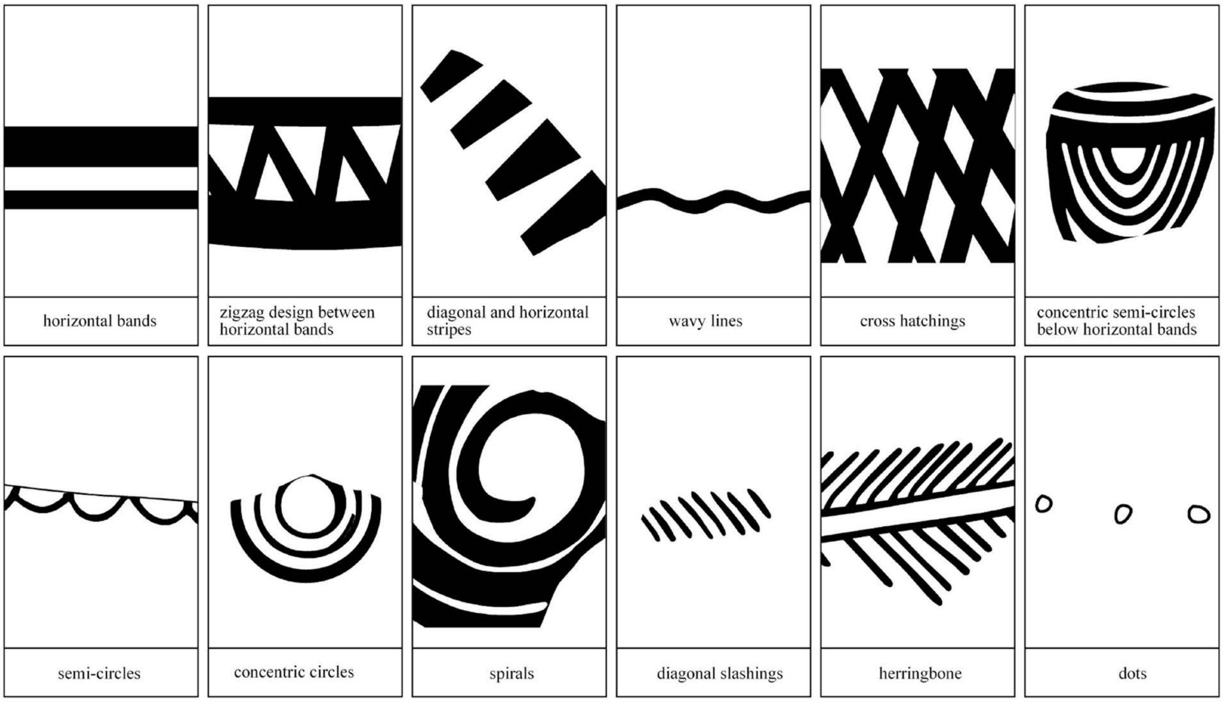
horizontal bands
zigzag design between horizontal bands
diagonal and horizontal stripes
wavy lines
cross hatchings
concentric semi-circles below horizontal bands
semi-circles
concentric circles
spirals
diagonal slashings
herringbone
dots

Figure 2: *Motif types on the South-Western Anatolian painted pottery.*

In general terms, it is possible to say that the Late Bronze Age tradition of local painted pottery starts to be attested in Level Ib/5a at Beycesultan, that is the later level of the 'Early Phase'. Although no statistical analysis about the amount of this painted pottery and its quantitative relation to the other wares exists in the old publications, it is clear that it was infrequently attested.[18] This painted pottery tradition is characterized by a surface treatment realized with a high quantity of mica called 'Gold Wash' and a matt red paint. All of the sherds discovered are wheel-made. There are bowls, beak spouted jugs, trefoil cups and body fragments of jars among the attested sherds (**Figures 3 and 8**). Wide single bands, zigzag design between horizontal bands, diagonal and horizontal stripes, cross-hatchings and concentric semi-circles below horizontal bands are among the painted motifs (**Figure 2**).[19]

The 'Late Phase' of the Late Bronze Age, approximately dated to the 14th–12th century BC, corresponds to Level 4/Ia at Beycesultan, Level V at Asopos Tepesi and Levels III–I at Aphrodisias (trench A4). Light Brown or Buff Ware, Red-Brown or Red Ware, Brown Ware and Gold-Silver Wash Ware are commonly attested in these levels. The most striking point about this material is that the number of Red-Brown or Red Wares decreases from the previous period and Light Brown or Buff Ware takes its place. Simultaneously, painted pottery associated with Gold Wash Ware gains importance and becomes typical of this phase. Another distinctive characteristic of this period is that in general the amount of Gold Wash Ware also considerably increases. The frequency of sherds with mica surface treatment is 60% at Level III–II at Aphrodisias and 36% at Level V at Asopos Tepesi.

The final Late Bronze Age is represented by some weak architectural remains in all three settlements. Relatedly, it has been seen that local painted pottery exists in both productive and domestic areas. Its

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[18] Mellaart and Murray 1995, 22, 57.

[19] Mellaart and Murray 1995, 40, Fig. 18b.14, 67, Fig. 31.9, 74, Fig. 38.6–8,11; Marchese 1976, 402; 1978, 22, Tab. 1.

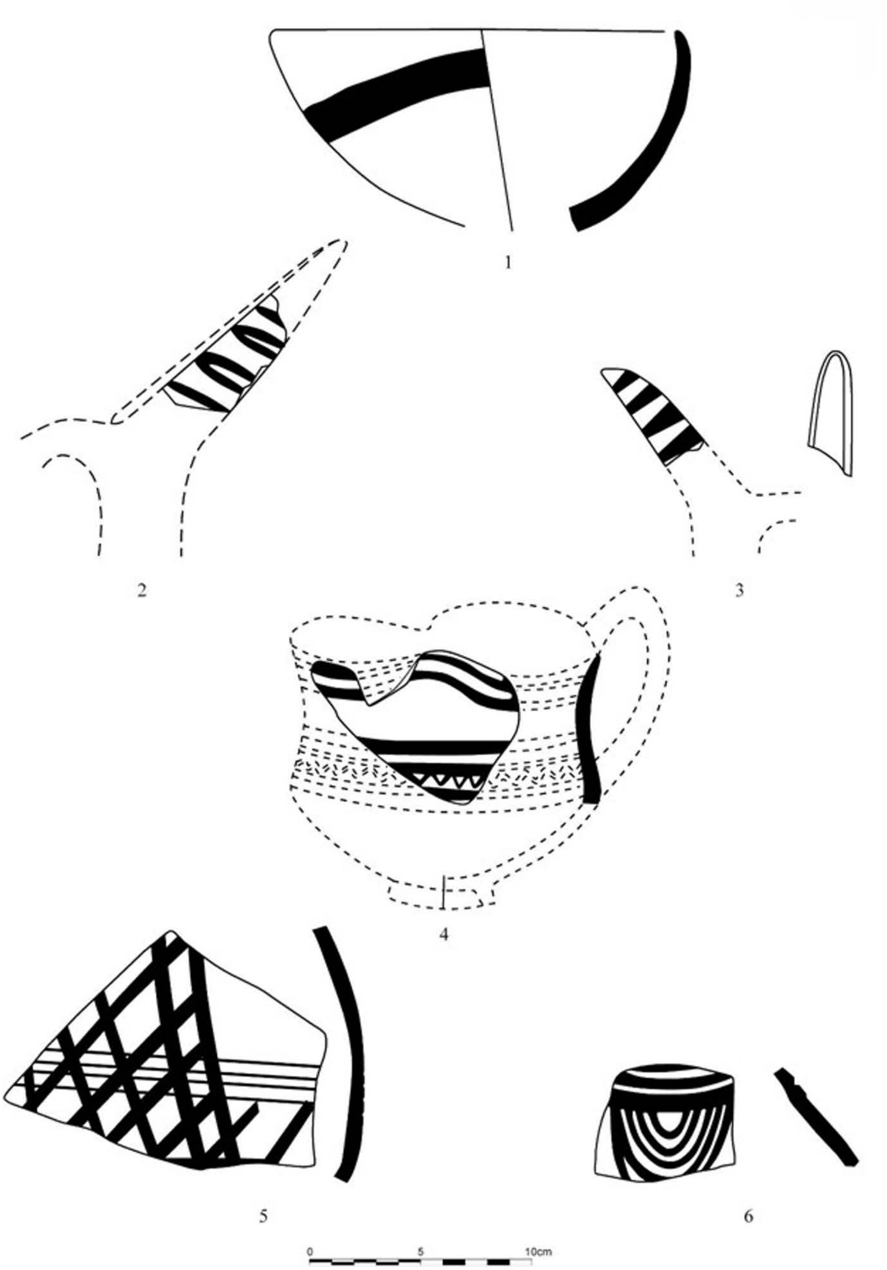

Figure 3: *Late Bronze Age local painted pottery from Beycesultan (see catalogue for detailed descriptions).*

amount is very limited at Beycesultan, while it has been found at Aphrodisias with a frequency of 10% in Level III, 8% in Level II, and 5% in Level I.[20] Its frequency is 5% at Level V of the Asopos Tepesi.[21]

Painted pottery attested at Aphrodisias III–II and Asopos V was commonly realized on Gold Wash Ware and Red or Buff Wares with decorative motifs painted with red-brown, brown and grey-black matt colours. In Level I of Aphrodisias, a gold wash slip was applied on red paste, and after that a matt red or red-brown painted decoration was added. Among the shapes, there are bowls, beak spouted

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[20] Marchese 1976, 402–407; 1978, 22.

[21] Konakçı 2015, 224.

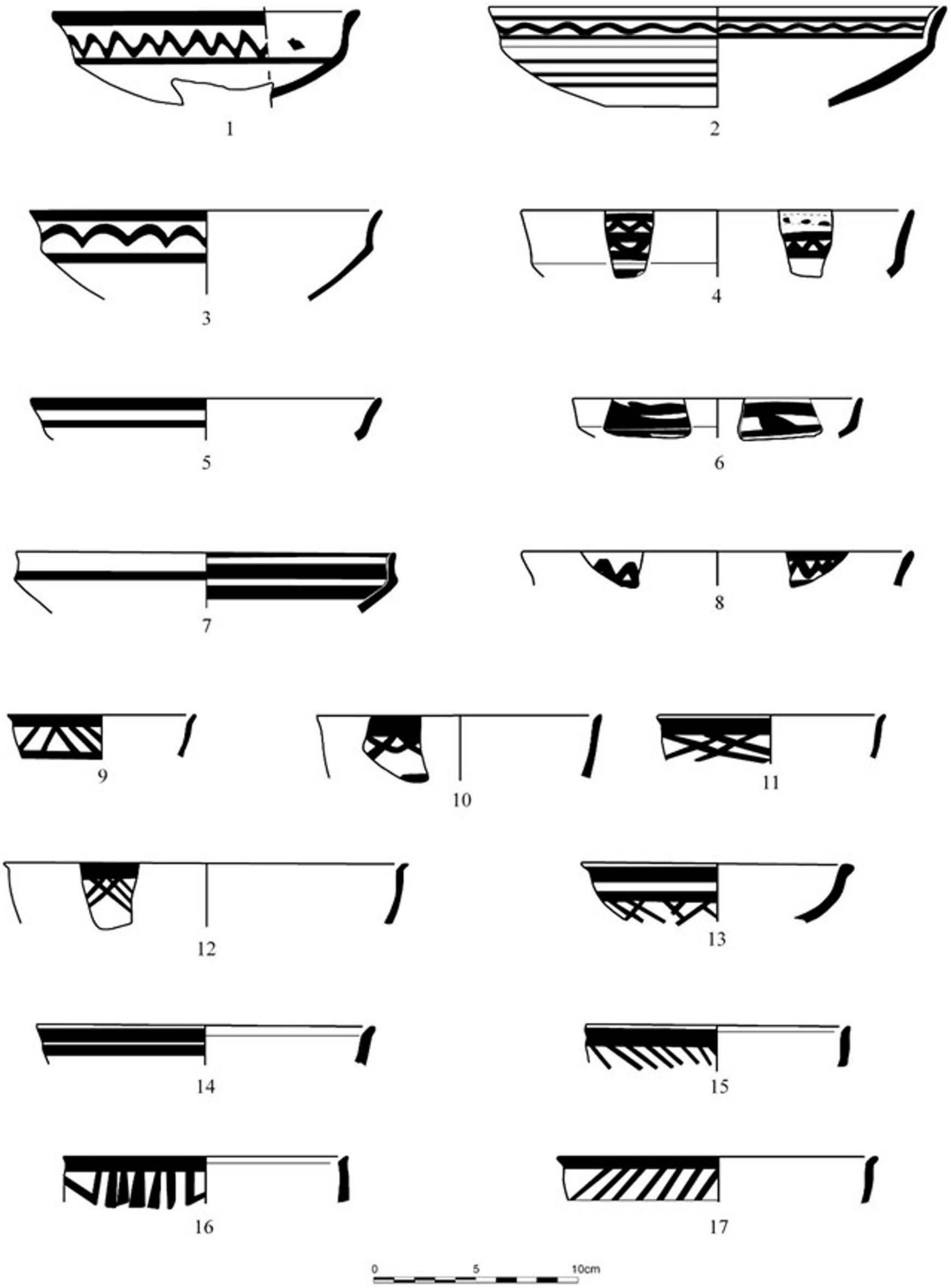
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Figure 4: *Local painted pottery (bowls) from the late phase of the Late Bronze Age from Aphrodisias (1, 3, 7, 9–17) and Asopos Tepesi (2, 4–6, 8) (see catalogue for detailed descriptions).*

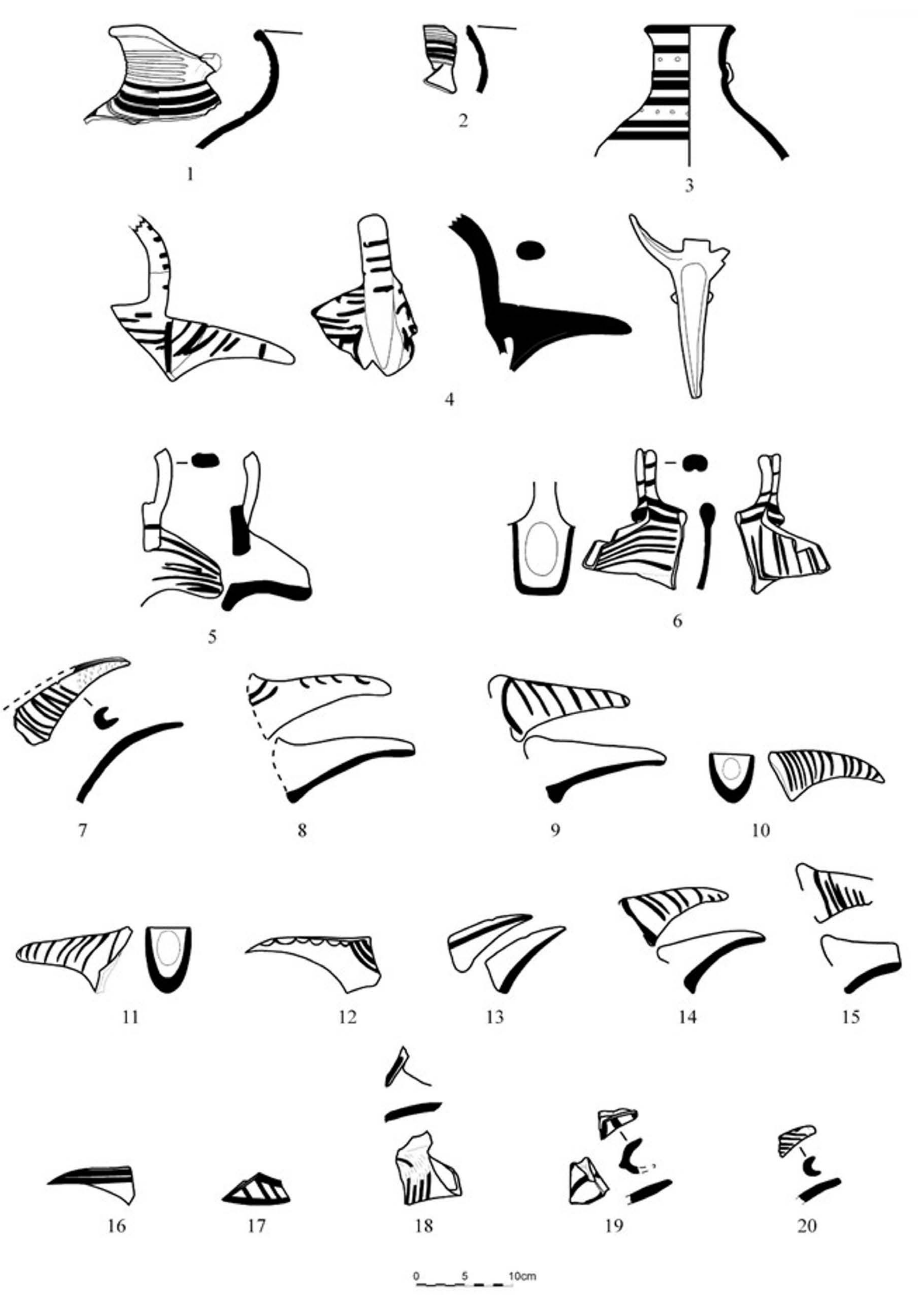
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Figure 5: *Local painted pottery (jars and jugs) from late phase of the Late Bronze Age from Asopos Tepesi (1–2, 7, 18–20), Aphrodisias (3, 5–6, 8–17) and Beycesultan (4) (see catalogue for detailed descriptions).*

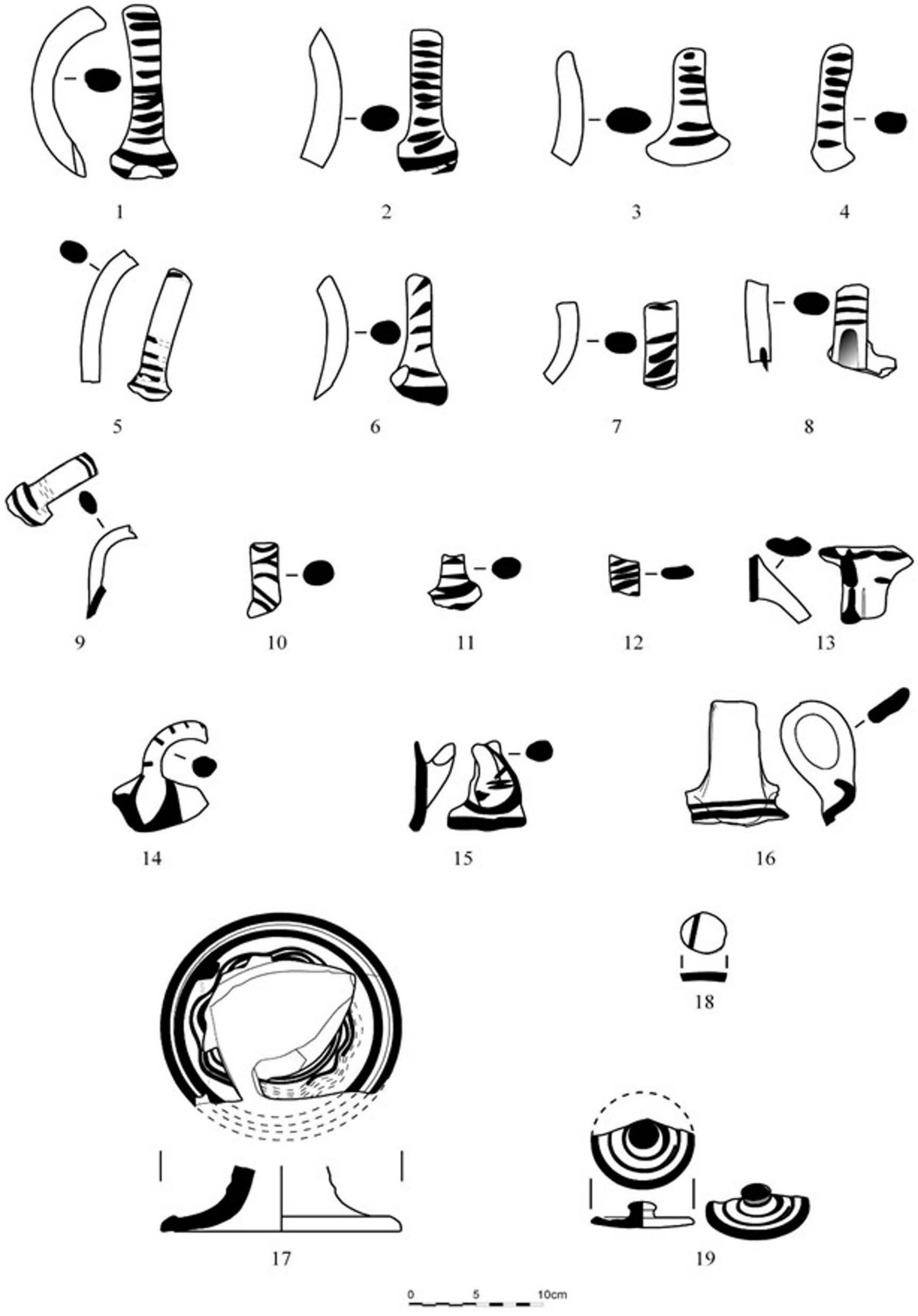
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Figure 6: *Local painted pottery (handles, stands and lids) from late phase of the Late Bronze Age from Aphrodisias (1–4, 6–7, 10–15) and Asopos Tepesi (5, 8–9, 16–19) (see catalogue for detailed descriptions).*

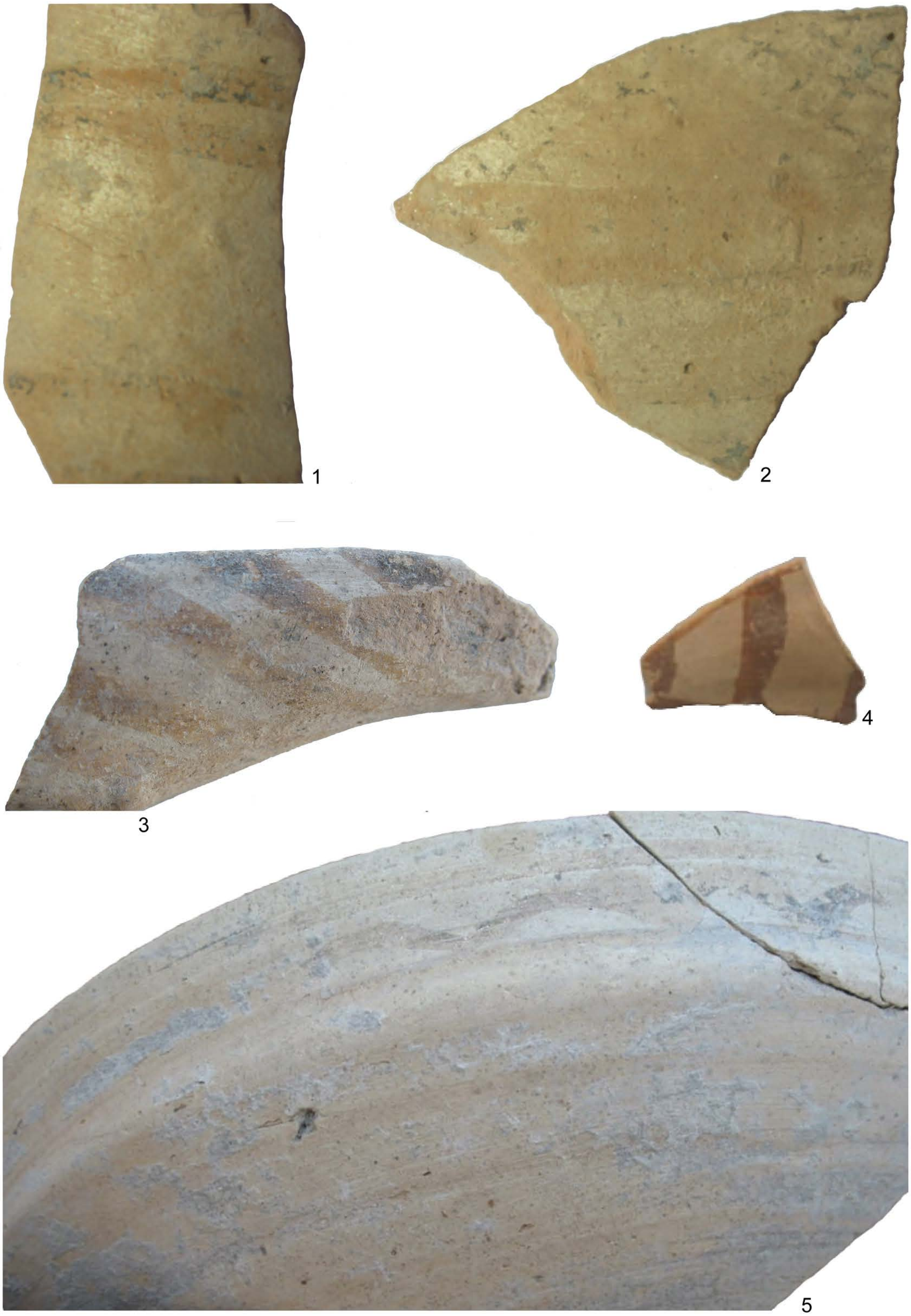

Figure 7: *Local painted pottery samples from Asopos Tepesi: 1–2 (not in catalogue), 3 (Cat. No. 5.20), 4 (Cat. No. 5.19), 5 (Cat. No. 4.2).*

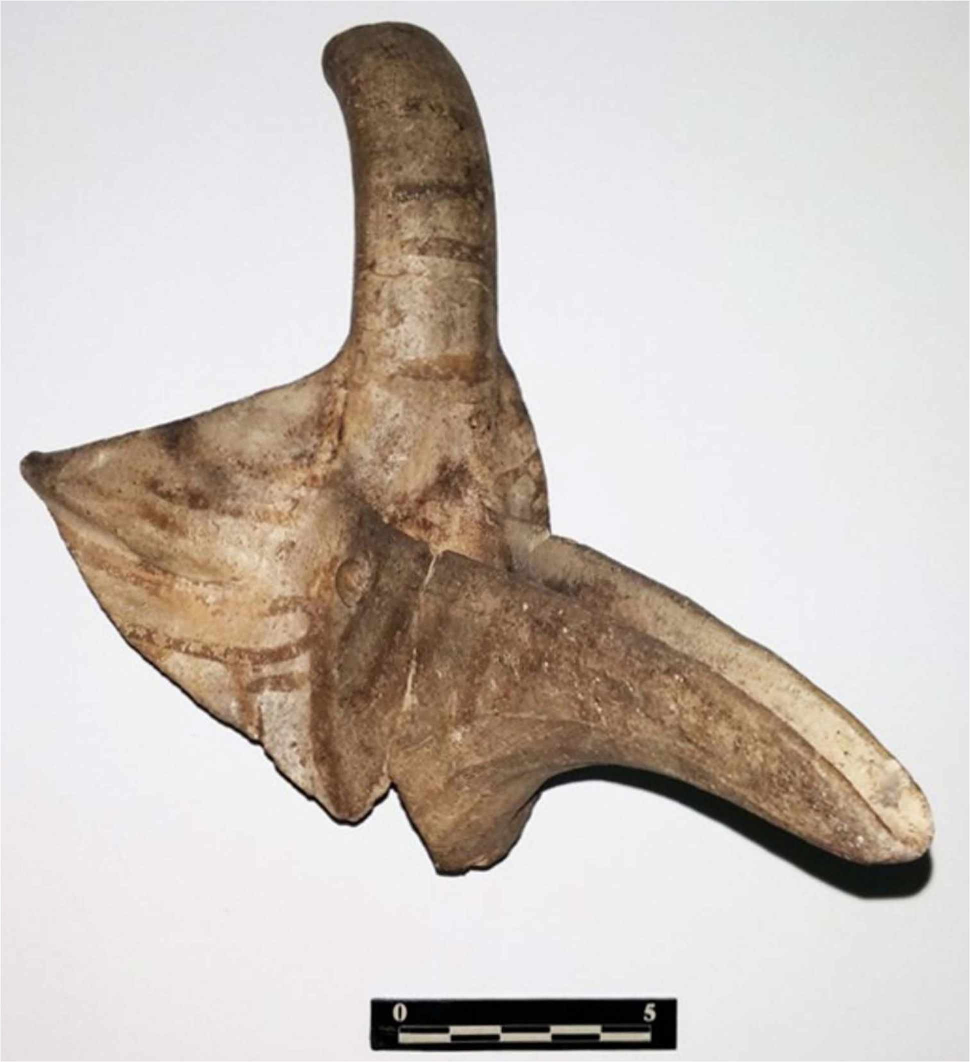

Figure 8: *Local painted pottery from Beycesultan (Cat. No. 5.4).*

jugs, jars, jugs as well as handle fragments belonging to various forms.[22] Horizontal bands, zigzag design between horizontal bands, diagonal and horizontal stripes, wavy lines cross-hatchings, semi-circles below horizontal bands, concentric circles, spirals, diagonal slashes, herringbone, and dots are among the painted motifs (**Figures 4–8**).[23]

Conclusion

The local painted pottery tradition attested during the Late Bronze Age is an outstanding and distinctive group in the Upper Meander basin. Archaeometric analyses (i.e. thin section and XRF analyses) show that these ceramics were locally produced.[24] Indeed, the results of thin sections and XRF stress the use of both similar clay sources for all the painted wares here considered and for the rest of the plain local productions typical of the region. Surface treatments realized with mica have to be considered also characteristic of this production.

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[22] Joukowsky 1986, 682, Fig. 487, 685, Fig. 488, 687, Fig. 489, 689, Fig. 490.

[23] Marchese 1976, 401; Marchese 1978, 22, Tab. 1; Joukowsky 1986, 682–691, Fig. 487: 1–8, 11, 13, Fig. 488: 3, 5–6, 8–9, 11–18, 20–28, 30–31, 35–41, 44–45, 50–59, Fig. 489: 7, 11, 13–14, 18–21, 24, 27, 30–31, 33–34, 38–53, 55, 69–70, Fig. 490: 4, 8, 10, 15, 17, 23, 36–38, 50.

[24] Dedeoğlu and Konakçı 2015, 195.

It has been seen that painting is realized on different shapes and with several decorative patterns. This is evident at Beycesultan, Aphrodisias and Asopos Tepesi where horizontal bands, zigzag design between horizontal bands, diagonal and horizontal stripes, wavy lines, cross-hatching, concentric semi-circles below horizontal bands, semi-circles and concentric circles motifs are attested (**Table 1**).[25]

It might be said that some motifs are associated with specific forms. For instance, horizontal bands and wavy lines are commonly seen on bowls in particular, whereas diagonal and horizontal stripes are attested on beak spouted jugs and handles (**Table 2–3**).

MOTIFS	**Early LBA**	**Late LBA**				
	Beycesultan		**Aphrodisias**			**Asopos**
	5a (Ib)	**4 (Ia)**	**III**	**II**	**I**	**V**
horizontal bands	X	X	X	X	X	X
zigzag design between horizontal bands	X		X			X
diagonal and horizontal stripes	X	X	X			X
wavy lines			X	X		X
cross hatchings	X		X	X		X
concentric semi-circles below horizontal bands	X					
semi-circles			X	X		X
concentric circles			X	X		X
spirals			X	X		
diagonal slashings			X			
herringbone			X			

Table 1: *Appearance of painted pottery motifs in Beycesultan, Aphrodisias and Asopos Tepesi.*

MOTIFS	**Early LBA**			
	bowls	**beak spouted jugs**	**trefoil cup**	**body fragments of jars**
horizontal bands	X			
zigzag design between horizontal bands			X	
diagonal and horizontal stripes		X		
cross hatchings				X
concentric semi-circles below horizontal bands				X

Table 2: *Appearance of painted pottery motifs on pottery forms/types from the early phase of the Late Bronze Age*

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[25] Dedeoğlu and Konakçı 2015, 197.

MOTIFS	Late LBA							
	bowls	**beak spouted jugs**	**jars**	**jugs**	**pedestals**	**lids**	**handles**	**undefined body sherd**
horizontal bands	X			X				
diagonal-horizontal stripes		X					X	
zigzag design between horizontal bands	X							X
wavy lines	X				X			X
cross hatchings	X		X					X
concentric semi-circles below horizontal bands								
semi-circles	X	X	X					
concentric circles					X	X		
spirals			X	X				
diagonal slashings	X							X
herringbone								X
dots				X				

Table 3: *Appearance of painted pottery motifs on pottery forms/types from the late phase of the Late Bronze Age.*

The tradition of local painted pottery has often been interpreted as an imitation of the Mycenaean wares.[26] However, it should be considered that the local painted pottery presents a proper homogeneity in its style and decorative elements, and that this tradition stretches over a long time-span, from the 16th to the 12th century BC. This means that the local painted pottery tradition was already well attested when the Mycenaean one arrived. The research carried out in the Meander basin has already proved that traces of the Mycenaean pottery can be seen at Çine Tepecik Höyük.[27] No more than a few sherds have been found east of Çine Tepecik Höyük. On the other hand, we should not ignore the possibility that a limited amount of these sherds might be misinterpreted and might belong to local painted pottery.

The local painted pottery tradition continues to be attested at Aphrodisias in the Early Iron Age and, with the discovery of only a few sherds, also at Asopos Tepesi.[28] Painted pottery similar to those described have also been found in Cilicia,[29] for example at Kilisetepe, Kinet Höyük, Tarsus-Gözlükule, and Mersin-Yumuktepe during the Late Bronze Age up to the Iron Age transition.[30] However, despite the great similarity with the motifs seen in Cilicia, it should be noted that the application of a gold wash, which is one of the main features characterizing the Upper Meander basin, is not attested there.

The painted sherds that have recently been found at the site of Kaymakçı show instead a gold wash treatment and are particularly comparable with the tradition of the Upper Meander basin.[31] Future research might probably allow a better understanding of the painted tradition not only in the Upper Meander basin, but also in broader areas in Inland Western Anatolia.

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[26] Marchese 1978, 15.

[27] Günel 2010, 28.

[28] Şimşek and Konakçı 2013, 4.

[29] See the contributions about Cilicia by Jean, Ünlü, Kozal, and Yaşin and Aksoy in this volume.

[30] Postgate and Hansen 1999, 113; Postgate 2008, 166; Ünlü 2005, 146; Sevin and Köroğlu 2004, 80.

[31] Roosevelt *et al.* 2018, Fig. 7; Roosevelt and Luke 2017, 125.

In conclusion, the presence of this local painted pottery tradition is significant for the chronology and history of the 2nd millennium BC in Anatolia. It might be defined as one of the elements that characterizes the Late Bronze Age in Inland West Anatolia.[32]

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Figure 6.19: Asopos Tepesi, L.10.AT2.C2.L38.130, light brown clay colour (5YR 6/6) sand and lime inclusion, matt red pain on gold wash, concentric circles, hard fired.

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Late Bronze Age Painted Pottery and its Contextual Relationship to the Hittite Levels at Ovaören

S. Yücel Şenyurt and Atakan Akçay

Abstract

Ovaören is located 25 km south of the Kızılırmak River, within the boundaries of Nevşehir province. At approximately 40 hectares in size, it is one of the most important archaeological sites of the region. There are three different archaeological areas in Ovaören; Topakhöyük, Terrace Area and Yassıhöyük. While Topakhöyük and its large terrace were inhabited from the beginning of the Early Bronze Age to the end of the Middle Bronze Age, the most prominent layers of Yassıhöyük are dated to the Late Bronze Age and Iron Age. The Late Bronze Age settlement spreads over an area of approximately 17 hectares. Although few in number, the 'Painted Pottery' specimens uncovered in the Late Bronze Age layers at Ovaören have been classified into specific groups in terms of their production and decoration techniques. The most significant group is the hatched decorated one. The closest parallels to the Ovaören Late Bronze Age painted pottery are found in the Late Bronze Age layers of Tarsus-Gözlükule LBII, Yumuktepe VII–V, Kilise Tepe IIa–c, Oluz Höyük 7B and Soli Höyük. The painted tradition found in the Late Bronze Age layers at Ovaören reveals significant results for the origin and chronology of regional developments in Hittite pottery.

Keywords

Central Anatolia, Hittite, Kızılırmak river, Ovaören, painted pottery

Özet

Ovaören, Nevşehir sınırları içerisinde Kızılırmak'ın yaklaşık 25 kilometre güneyinde yer almaktadır ve 40 hektara yaklaşan boyutları ile bölgenin en önemli arkeolojik merkezlerinden birisidir. Ovaören'de Topakhöyük, Teras Alanı ve Yassıhöyük olmak üzere üç farklı alan bulunmaktadır. Topakhöyük ve geniş Teras Alanı Erken Tunç Çağı'nın başlarından Orta Tunç Çağı'nın sonlarına kadar yerleşim görmüştür. Geç Tunç Çağı ve Demir Çağı'na tarihlenen tabakalar ise Yassıhöyük'te yer almaktadır. Geç Tunç Çağı yerleşimi yaklaşık 17 hektarlık bir alana yayılmaktadır. Ovaören'de Geç Tunç Çağı tabakalarında ele geçen boyalı seramikler sayıları az olmakla birlikte, yapım teknikleri ve bezemeleri açısından belli gruplar altında toplanabilmektedir. Boyalı seramikler içerisinde en dikkat çekici grup ise "hatched decorated" olarak adlandırılan örneklerdir. Bu bezemeye sahip kapların teknik özelliklerinde de görülen benzerlikler dikkat çekicidir. Ovaören Geç Tunç Çağı boyalı seramiklerinin en yakın benzerleri Tarsus-Gözlükule LBII, Yumuktepe VII–V, Kilise Tepe IIa–c, Oluz Höyük 7B, ile Soli'nin Geç Tunç Çağı'na tarihlendirilen tabakalarında ele geçmiştir. Ovaören'de Geç Tunç Çağı tabakalarında (YH 9-10) ele geçen boyalı seramikler, Hitit boyalı seramik geleneklerinin kökeni ve kronolojisi açısından önemli sonuçlar ortaya koymaktadır.

Anahtar kelimeler

Orta Anadolu, Hitit, Kızılırmak, Ovaören, boyalı seramik

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 99–112

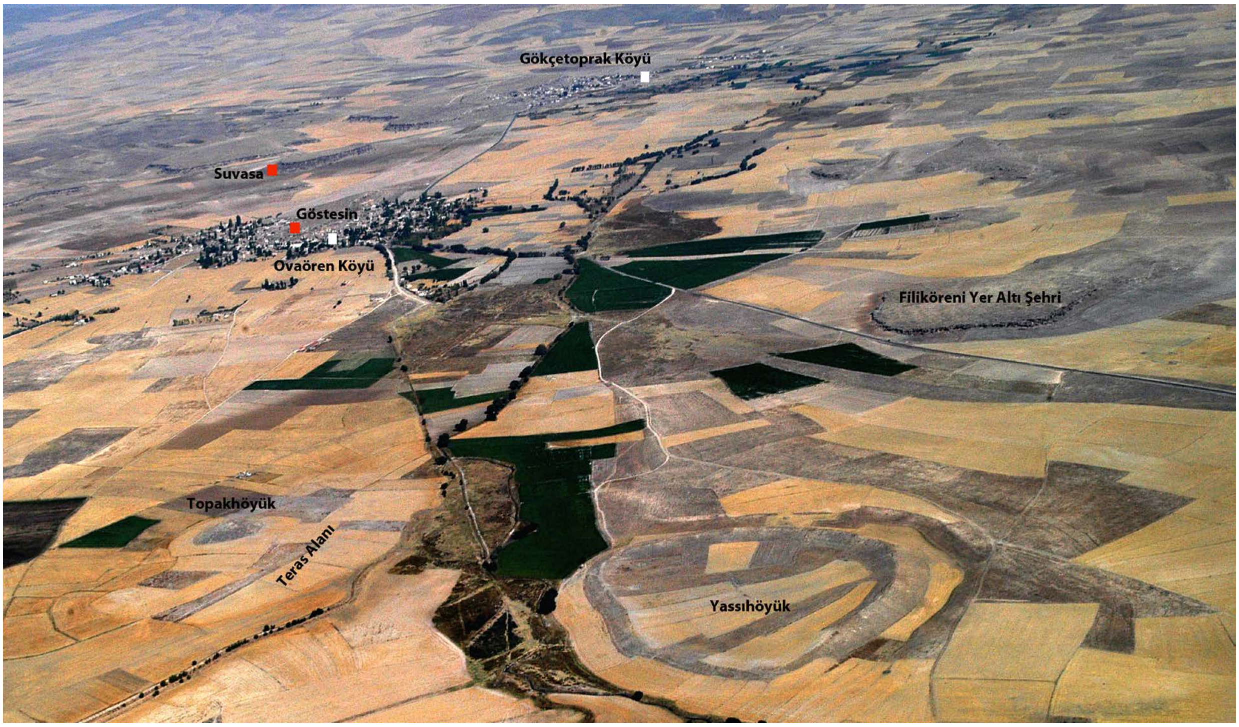

Figure 1: *Ovaören and its vicinity.*

Ovaören: excavation areas and stratigraphy

Ovaören is located at the boundaries of the Gülşehir district in the Nevşehir province about 25 km south of the Kızılırmak river. It presents an uninterrupted settlement history from the beginning of the Early Bronze Age to the Roman period. The excavations at Ovaören (**Figure 1**) include three different sectors called Yassıhöyük, Topakhöyük and Terrace Area.[1] Investigations carried out in Yassıhöyük have allowed the identification of intensive Late Bronze Age and Iron Age layers. The earliest finds of Yassıhöyük (with dimensions of 475 x 350 meters) date to the Early Bronze Age III, though stratified deposits from this period have not yet been reached. The results from Topakhöyük and Terrace Area reveal that Ovaören, with its strategic location on the trade routes, was one of the important centres since the Early Bronze Age II.[2] After the period of the Assyrian Trade Colonies these areas were abandoned. During the Late Bronze Age, a settlement with defensive walls has been found in Yassıhöyük (**Figure 2**).[3] This fortification model continues until the end of the Hittite period.[4]

Although we still lack any certain data about the first construction phase of the Yassıhöyük *Kastenmauer* wall (**Figure 3**), it is certain that it was used until the end of the Hittite imperial period. The architectural layers of the Hittite imperial period (YH9–11), clearly identified in the north of the settlement, indicate that the site in this level increased in size and expanded to an area of about 17 hectares.

In the excavations carried out so far, no written sources were found to allow us to identify the name of the ancient city. However, the continuity of its occupation, beginning with the Early Bronze Age up

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[1] For the excavations carried out under the direction of Prof. Dr. S. Yücel Şenyurt, see Şenyurt 2010, 261–268; Şenyurt *et al.* 2014a, 62–80; 2014b, 101–120; 2016, 111–128; Akçay 2015, 47–54; Şenyurt and Akçay 2018, 95–117.

[2] Şenyurt *et al.* 2016, 111–116.

[3] Şenyurt *et al.* 2014b, 104–105, Res. 4, 8.

[4] Şenyurt 2010, 262–268; Akçay 2015, 53.

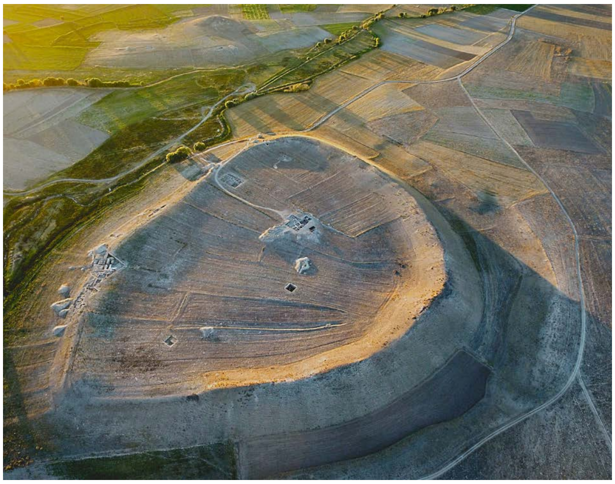

Figure 2: *Ovaören-Yassıhöyük.*

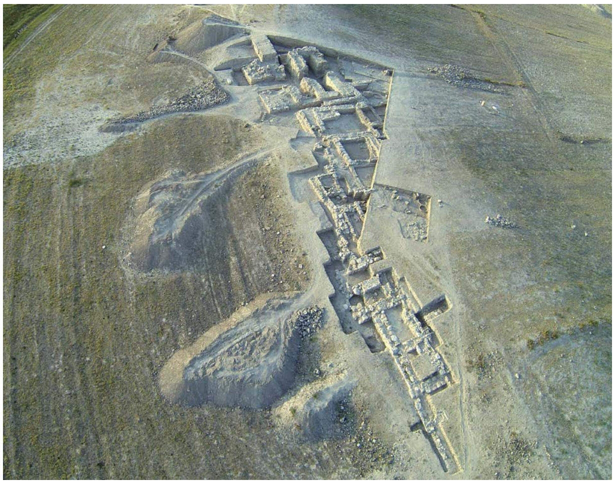

Figure 3: *Ovaören-Yassıhöyük, Hittite fortification walls.*

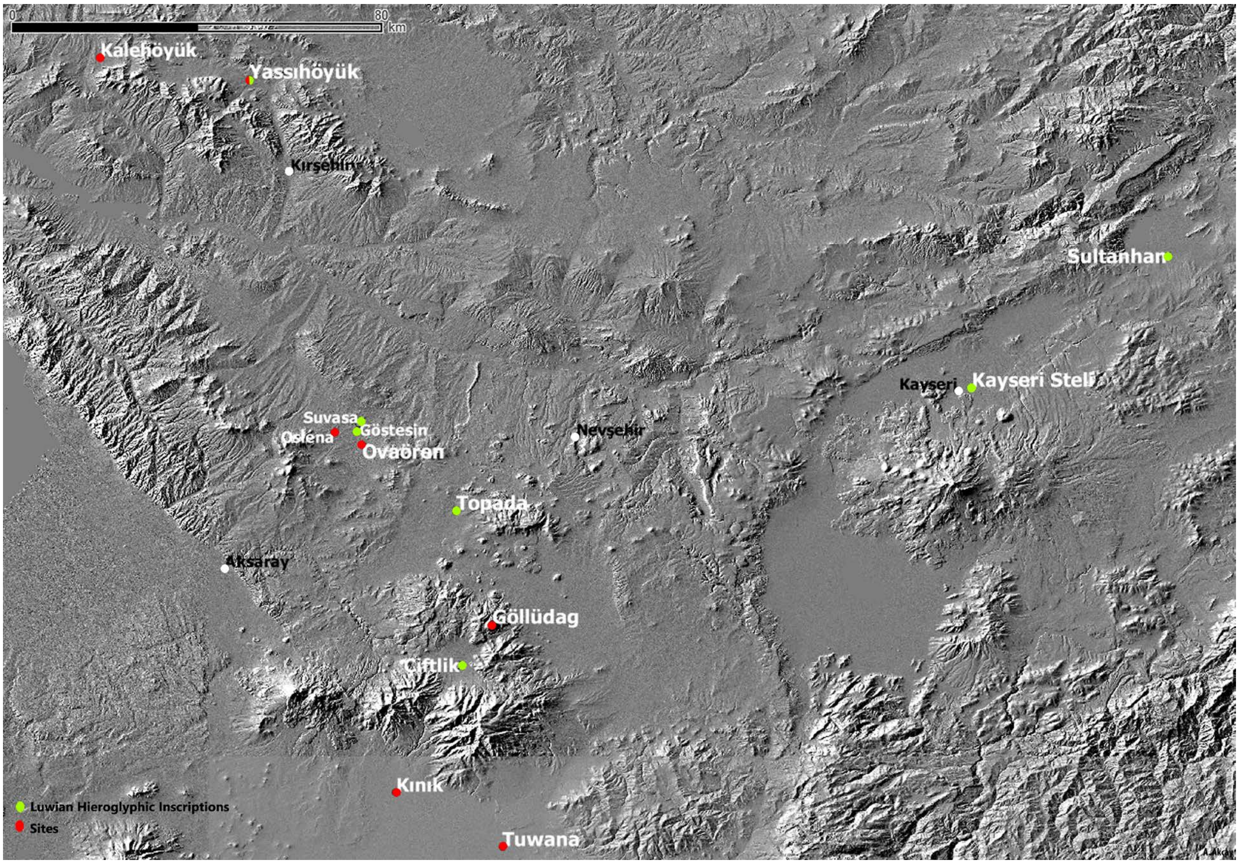
0
80
km
Kalehöyük
Yassıhöyük
Kırşehir
Sultanhan
Kayseri
Kayseri Steli
Suvasa
Göstesin
Oslena
Ovaören
Nevşehir
Topada
Aksaray
Göllüdag
Çiftlik
Kınık
Tuwana
Luwian Hieroglyphic Inscriptions
Sites

Figure 4: *Ovaören and other important sites.*

to the end of the Late Iron Age, allows us to make some suggestions for the location of Ovaören in the historical geography (**Figure 4**).[5] Ancient Osiana/Asiana, 4 km north-west of Ovaören, is significant within this context. It has been suggested that the Osiana mentioned in the *Itinenarium Antoninum* might be the underground city of Ozancık and the archaeological site on its surface within the boundaries of Aksaray.[6] Ozancık is one of the largest underground cities of the region reaching to the villages of

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[5] Şenyurt 2010, 262.

[6] Hild and Restle 1981, 251–252.

Ovaören and Babakonağı.[7] The actual importance of Osiana comes from its relation with the ancient Usian mentioned in the written sources of the period of Sargon II. This relation was firstly emphasized by E. Forrer,[8] and it is commonly accepted that there must be an association between Wašhaniya/Ušhania and U(i)šš/un as known from the Assyrian Colonies and the Hittite periods,[9] and that the Iron Age Usian and ancient Osiana might be the same place.[10] Moreover, according to M. Forlanini, it is very important to equate ancient Kelosin (close to Osiana) with modern Aksaray-Babakonağı (Gelesin) village in order to identify the ancient name of Ovaören.[11]

It seems thus possible to relate the urban identity of Ovaören, to ancient Osiana/Asiana mentioned above. In this context, we suggest that Wašhaniya/Ušhania/U(i)šš/una/Uššuna known from the Assyrian Colonies and Hittite periods and Iron Age Usian might all variant names for the same city located in this region and the strongest candidate for this city must be Ovaören.[12]

Late Bronze Age (Hittite) layers

As a reference for the Yassıhöyük stratigraphy, the trench of JF185 in the south-east sector of the site (Sector B) has been excavated down to the main soil level (**Table 1**).

Layer	Period	ca. Dates (BC)
9	Hittite Empire	1180–1350
10		
11	Middle Hittite	1350–1530
12	Old Hittite	1530– ?

Table 1: *Ovaören-Yassıhöyük Late Bronze Age stratigraphy.*

The Hittite layers (**Figure 5–7**) in this area are 1.5 meters thick and correspond to 4 architectural layers under an about 2.5-meter-thick Iron Age layer. The Hittite imperial period layers were destroyed (**Figure 5–6**) by the dwellings and silo pits of the Early Iron Age and by a silo like structure of about 3 meters in diameter and 1.5 meters in depth belonging to the Middle Iron Age. The building structures of the YH9 substantially reused those of YH10 (**Figure 6**) with some renovations and additions. Although the buildings of the 11th layer differ from the smaller square plans and orientation of the 9th and 10th layers, they are comparable in terms of wall thickness and architectural materials.

The majority of pottery finds come from the last Late Bronze Age layers (YH9–10). In particular there are a quite number of Drab Ware plates (**Figure 8**), a shape that was of genuine Hittite origin shows continuation from the period of the Middle Hittite until the end of the period of Hittite Empire. The most striking difference in the pottery repertoire of the Hittite Imperial period is that no examples of painted pottery have been found in YH11. In YH12, which is the earliest architectural layer in this area, the remains (**Figure 7**) constructed in pisé technique appear on the virgin soil level. Although it is

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[7] Bixio *et al.* 2012, 5–31.

[8] Forrer 1920, 76.

[9] Baryamovic 2011, 317, 326, footnote 1349, 1352, Map 16.

[10] Nashef 1991, 196–197; Forlanini 2008, 58, Map 1; 2009, 51.

[11] Forlanini 2009, 52.

[12] Şenyurt and Akçay 2018, 107–110.

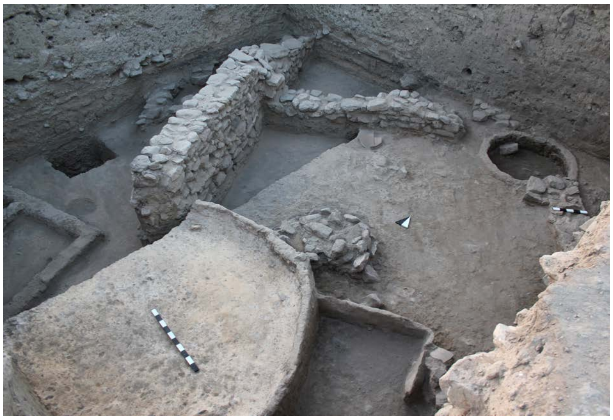

Figure 5: *Ovaören Hittite layers. Middle Iron Age silos and Early Iron Age layer.*

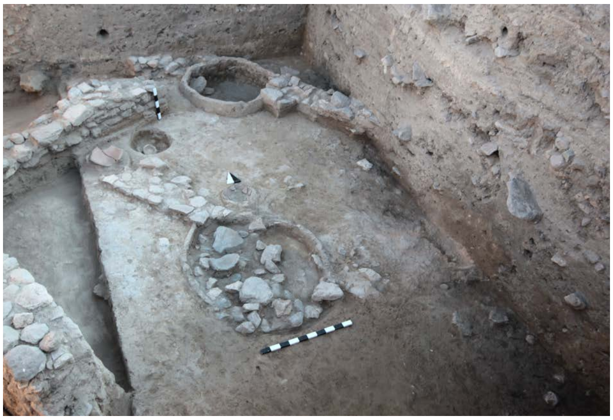

Figure 6: *Ovaören YH9–YH11 Hittite Imperial layers.*

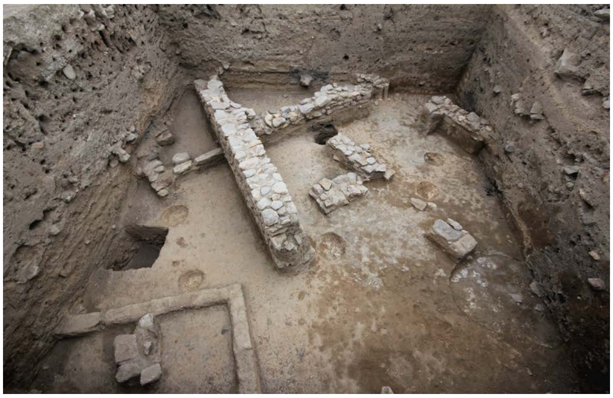

Figure 7: *Ovaören-Yassıhöyük Hittite layers.*

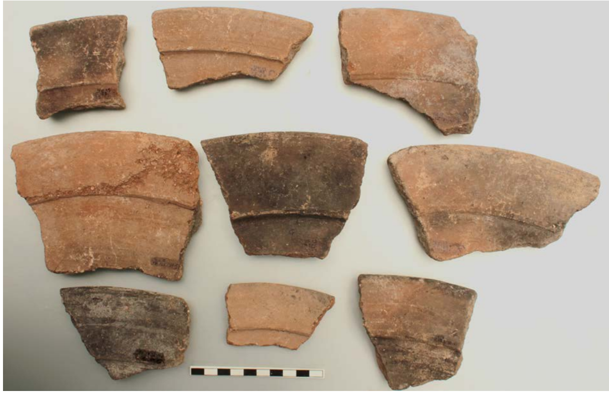

Figure 8: *Plates from YH9–YH10.*

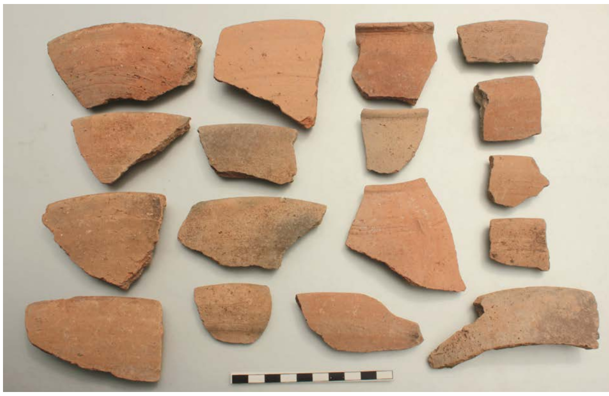

Figure 9: *Brown Drab Ware (YH 9–11).*

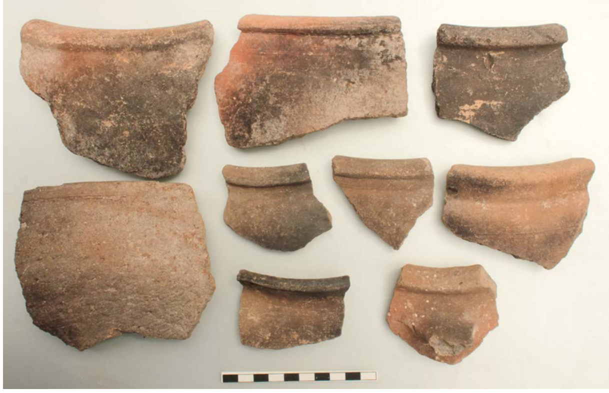

Figure 10: *Coarse Ware (YH 9–12).*

identified in a very limited area, the pottery finds of this layer, which completely differ from the upper ones in their architectural features, include examples of the Old Hittite period.

Ovaören painted pottery of Hittite period

The trench of JF185, in which the layers of the Hittite period were identified, contained the greatest number of pottery specimens at Ovaören. About 400 pottery fragments belonging to the Late Bronze

Brown Plain Ware	Red Plain Ware	Grey Plain Ware	Red Slipped Ware	White Slipped Ware	Brown Slipped Ware	Fine Brown Slipped Ware	Fine Red Slipped Ware	Fine White Slipped Ware	Course Ware	Painted Ware
% 46.88	% 6.50	% 2,71	% 8.94	% 8.40	% 3.79	% 1.08	% 1.35	% 2.71	% 12.46	% 5.14

Table 2: *Distribution of Late Bronze Age wares.*

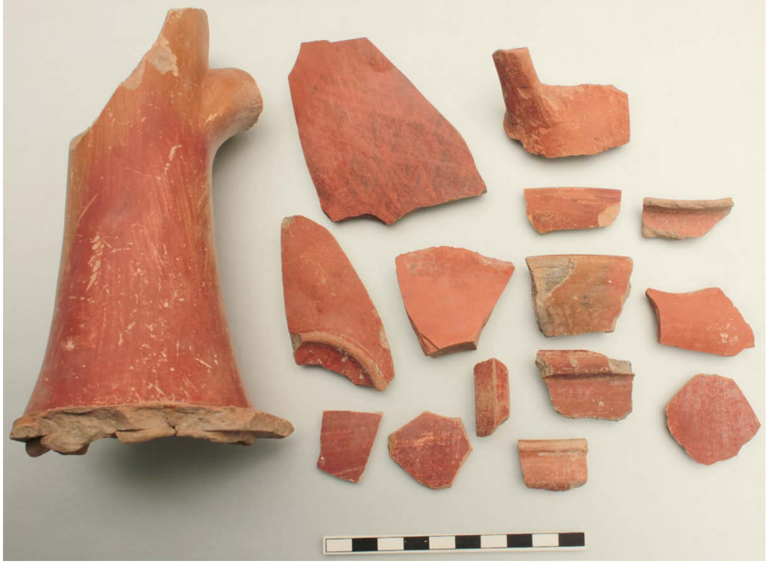

Figure 11: *Fine Red Slip Ware (YH9–YH10).*

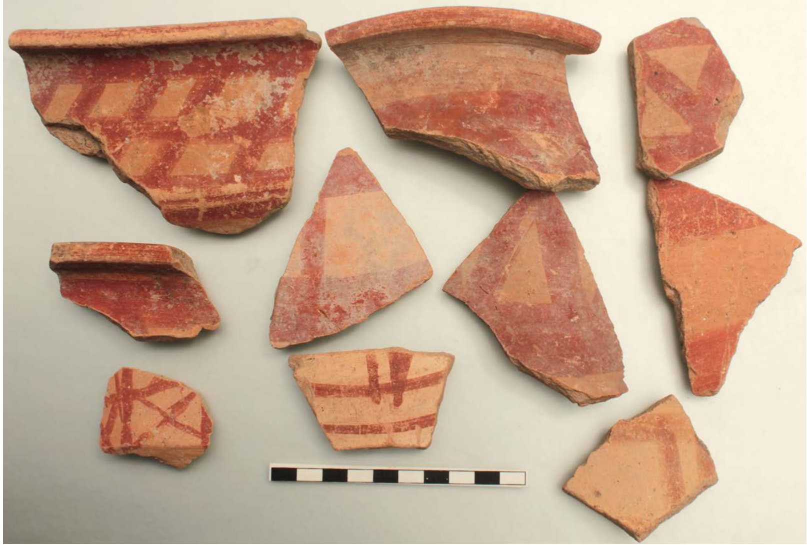

Figure 12: *Hatched-decorated pottery (YH 9–10).*

Age have been found.[13] The brown plain wares (**Figure 8–9**) constitute the majority of this assemblage, followed by a significant number of coarse cooking pot ware (**Figure 10**).

Apart from the examples of red, white and brown slipped wares, the fine ware examples (**Figure 11**) with the same slip colours were found mostly in the layers of the Hittite Imperial Period (**Table 2**).

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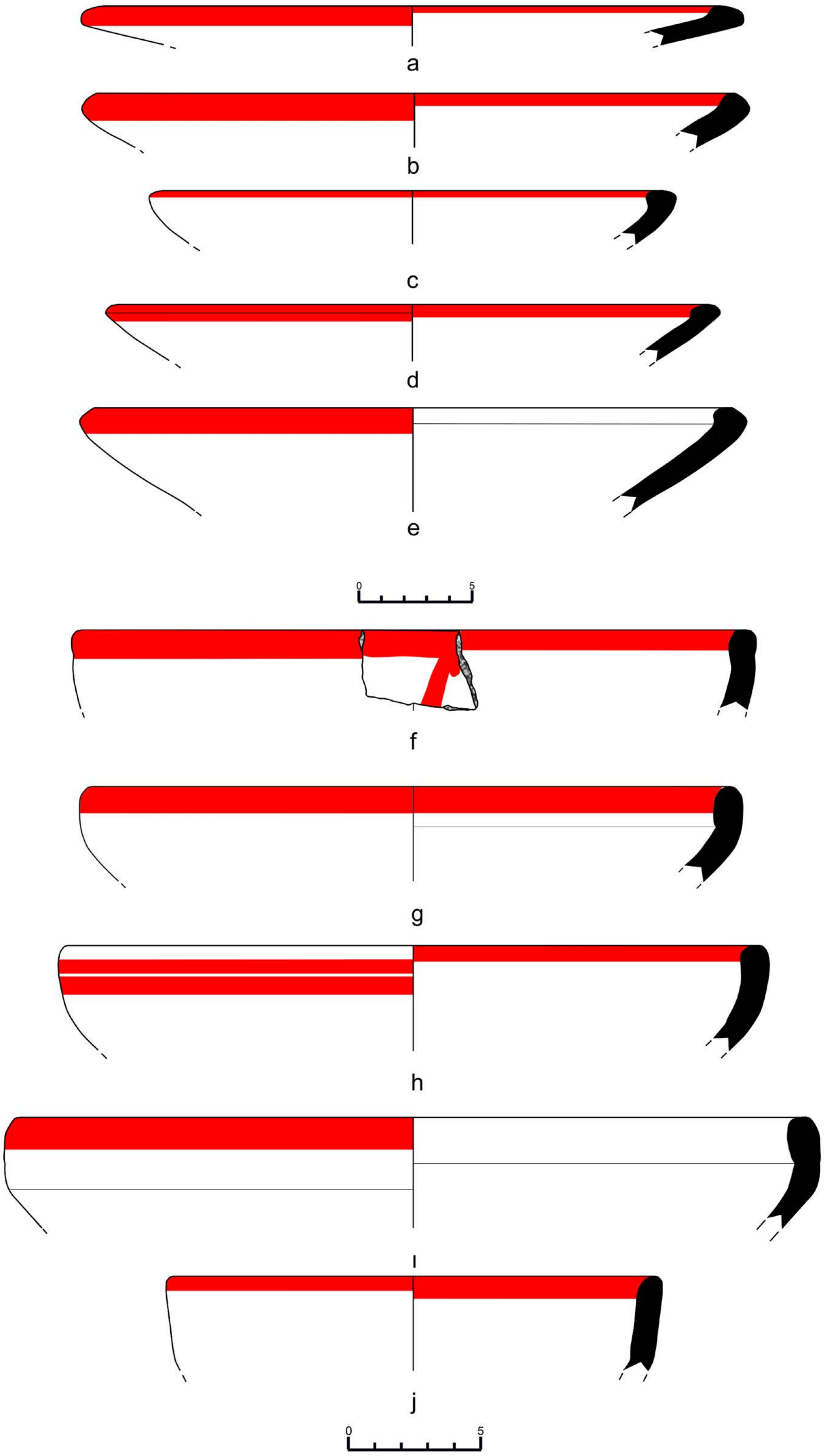
[13] İlhan 2017, 1.


a
b
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e
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Figure 13: *Painted plates and bowls (YH 9–10).*

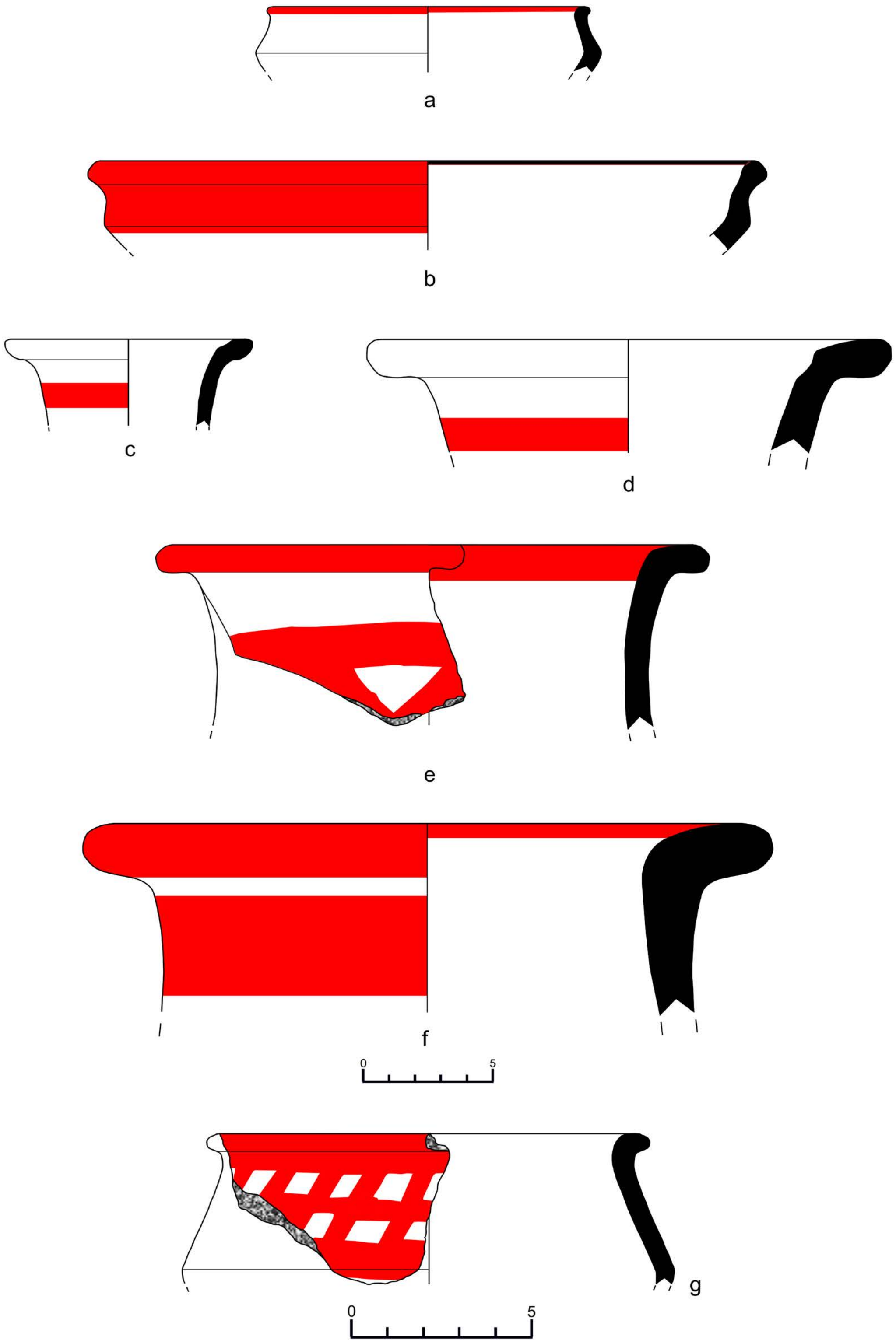

Figure 14: *Painted carinated bowls, pots and hatched-decorated pottery (*YH 9–10*).*

The first group among the painted pottery includes vessels with a red band that decorated both the interior and exterior of the rim (**Figure 13**). The second group consists of vessels with hatched decoration (**Figures 12, 14.g, 15**). The paint is in various shades of red (Munsell colour: 10R 5/6, 10R 4/6, 10YR 3/1, 2.5YR 4/4, 2.5YR 5/6, 5YR 5/6, 5YR 4/3, 5YR 4/4, 7.5YR 4/3 and 7.5YR 3/1). Considering the firing temperature ranges, only one sherd is mid-fired while the remaining are all well-fired. The clay is generally tempered with little mica, lime, sand and vegetal inclusions.

Among the Hittite pottery of Ovaören-Yassıhöyük, a great number of shallow bowls were found in the Hittite imperial period layers. The most prominent group consists of shallow bowls with in-turned and out-turned rim, that appear at Boğazköy from the Old Hittite to the imperial period.[14] Five of these shallow bowls (**Figure 13.a–e**) were decorated with a red band on the interior and exterior surface of the rim.

Among the deep bowls, which are one of the most numerous among the Hittite vessel forms, the simple rimmed ones in particular were found in all layers of Ovaören. Similar examples of bowls appear in the Hittite Imperial period layers of Boğazköy,[15] the Late Bronze Age layers of Tarsus-Gözlükule,[16] and the Hittite Imperial and Late Imperial period layers of Kuşaklı-Sarissa[17]. The rims of some simple rimmed bowls found in the YH9 layer (**Figure 13.f–j**) were decorated with red coloured application (Munsell colour: 10R 5/6).

Another vessel form which is common in the Ovaören Hittite Imperial period layers is the carinated bowl (**Figure 14.a–b**). These bowls can be compared to the examples found in the Hittite Imperial period layers of Boğazköy,[18] layer III of Maşat Höyük,[19] the Hittite Imperial period layers of Kuşaklı-Sarissa,[20] the layers II and I of Beycesultan,[21] dating to the Hittite Imperial and Late Imperial period, the Hittite Period layers of Uşaklı Höyük,[22] and the Hittite period cemetery of Gordion.[23] One of the painted carinated bowl from Ovaören (**Figure 14.b**) was decorated with a thick band from the rim to the carination, while another has a band on the rim (**Figure 14.a**).

The jars as well represent one of the most popular vessel forms in the Hittite Imperial period layers in the Ovaören. Similar examples of these vessels with thickened rim were found at Boğazköy,[24] the Hittite Imperial and Late Imperial period layers of Kuşaklı-Sarissa,[25] the Hittite layers of Uşaklı Höyük,[26] the Late Bronze Age layer IIb of Tarsus-Gözlükule,[27] and in the Gordion Hittite Period cemetery.[28] Two jars (**Figure 14.c–d**) found at Ovaören were decorated with a red band on the neck.

Among the pots, the majority have an out-turned rim and narrow neck. These vessels, belonging to the brown drab ware group, are found frequently in the YH9 layer. It is possible to suggest that this type of pot continued to be used at Ovaören from the earliest period to the end of the Hittite Empire. Two

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[14] Gunter 1980, 59, Fig. 27, 161, 182, 190; Müller-Karpe 1988, Lev. 33–34: S3, S4a–d.

[15] Müller-Karpe 1988, Lev. 40, S12a.

[16] Ünlü 2016, 6, Fig. 7.

[17] Mielke 2006, Abb. 105.

[18] Müller-Karpe 1988, Lev. 37–38, 40–41, Lev. 38: S9, S10a.

[19] Özgüç 1982, Fig. A: 31–35.

[20] Mielke 2006, Abb. 100–101.

[21] Mellaart and Murray 1995, 40, P18b, Şek. 5, 68, P32, Şek. 5, 7, 9, 11, 15, 18.

[22] Pecchioli Daddi and Mazzoni 2015, Fig.10, Şek. 224–225, 234, Fig. 13, Şek. 213, 317, 321.

[23] Mellink 1956, 28, H4, H6, H19, H22, H29, H32, H38, H39.

[24] Müller-Karpe 1988, Lev. 3–4.

[25] Mielke 2006, Abb. 29.

[26] Pecchioli Daddi and Mazzoni 2015, Fig. 20, Şek. 446–447, 449.

[27] Ünlü 2016, 5, Fig. 5, Şek. 1.

[28] Mellink 1956, Lev. 13: e.

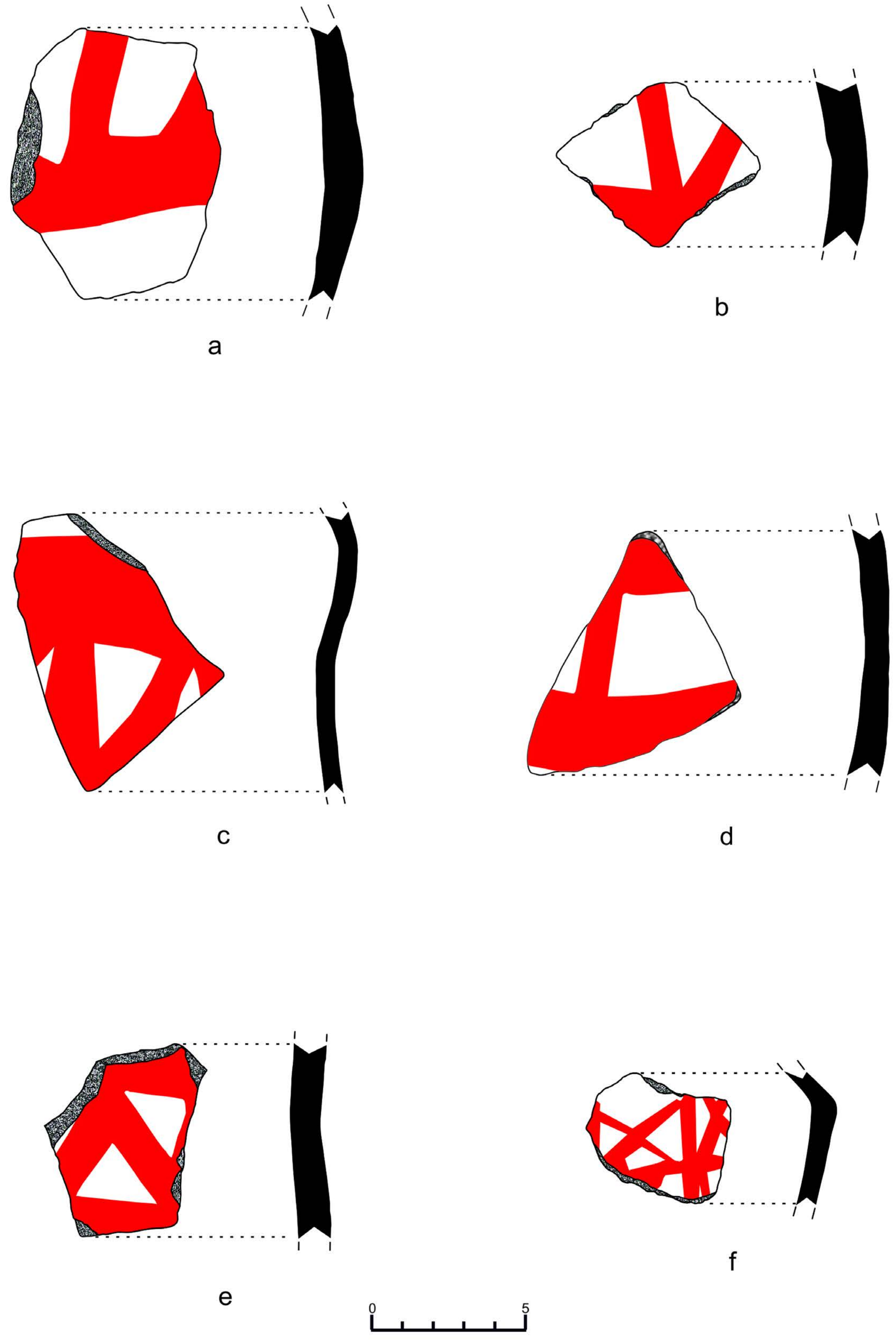

Figure 15: *Painted sherds from YH9.*

examples from the YH10 layer (**Figure 14.e–f**) were decorated with a red band on both the interior and exterior part of the rim and one of them has geometric designs of parallel bands and triangles on the neck. This decoration type consisting of cross hatched bands is defined as 'Hatched Decoration'. A red painted hatched decoration can also be seen on a pot found in the YH10 layer (**Figure 14.g**). Other painted examples are body sherds (**Figure 15**). Because they are poorly preserved, the motifs cannot be easily identified. Only the cross pattern of thick red bands can be distinguished. All related fragments were found in the YH9 layer.

Conclusion

Ovaören, lying 25 km south of the Kızılırmak river, reveals highly important results for the archaeology of Central Anatolia with its uninterrupted history from the Early Bronze Age to the Roman period. In this framework, the data obtained from the Ovaören Hittite levels are exceedingly important due to the fact that they come from a settlement outside the Hittite core region. Outside of the Kızılırmak bend, the Hittite settlement of Ovaören located on the northern borders of the Hittite Lower Land spreads across an area of 17 hectares. Although they were discovered in a limited area, the pottery specimens from four architectural layers are numerous enough to make new contributions to our understanding of the relationship established between the settlements in the Kızılırmak bend and the Hittite centres in the region of Cilicia.

Among the pottery found in the Hittite layers of Ovaören-Yassıhöyük, the Drab Ware constitutes the majority of the assemblage (55%). These wheel-made, middle-fired and plain wares are divided into three subgroups: brown, red and grey. The most remarkable feature of this ware is its continuation from the period of the Assyrian Colonies until the end of the Hittite period. The red, brown, and white slipped examples, which have the same fabric features, constitute 20% of the Ovaören Hittite pottery. In addition, the well-fired, thin-walled, red-brown and white slipped fine wares tempered with very small inclusions form 6% of Ovaören Hittite pottery.

The majority of the Ovaören Hittite period pottery groups are plates and deep bowls. The most common types of deep bowls, which continued from the Early Bronze Age, are hemispherical forms with a slightly out-turned rim. Among the Hittite plates and deep bowls of Ovaören, the distinct examples with a painted band on the rim were only found in the Hittite Imperial period layers. Of the jars belonging to the Hittite Imperial period only two examples with band decoration on the rim were found at Ovaören.

The flat plates, one of the most characteristic forms in the pottery repertoire of the Hittite Period, are found in great number at Ovaören. It has been suggested that they were used as baking vessels and appeared in the Hittite period.[29] The coarse examples of these plates began first to appear in YH11 at Ovaören. The better fired and relatively fine examples increase in the YH10 and YH9 layers. There are significant similarities between the plates known from the Imperial period layers of Boğazköy and Ovaören in terms of both technical and typological features.[30] These plates represent a standard production and offer a reference point for the chronology of Ovaören Hittite painted pottery found in the same contexts.

The pottery coming from the YH12 layer, which represents the earliest architectural layer found yet in Ovaören-Yassıhöyük, matches with the pottery traditions of the Middle Bronze Age and Old Hittite Period. The simple rimmed, plain, brown slipped, and polished examples are common in this layer. A remarkable issue is the lack of painted pottery and plates in this layer.

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[29] Schoop 2011, 246–247.

[30] See Müller-Karpe 1988, Lev. 42–43 for Boğazköy.

Examples of Hittite period painted pottery at Ovaören-Yassıhöyük are comparatively few in number and do not deviate from the monochrome forms. The first group of the painted pottery has red or dark brown band decorations applied on the interior and exterior of the rim. These painted decorations are particularly seen on shallow and deep bowls, jugs and pots coming from the YH10 and YH9 layers. The second painted group comprises a few examples decorated with hatching, triangles or thick wavy lines. It shows that the hatched-decorated and painted band began to emerge as a different tradition in the Hittite standard repertoire in the Hittite Imperial Period.

The painted pottery from Tarsus-Gözlükule appeared in Late Bronze Age IIb and continued to be used until the end of the Imperial Period.[31] The hatched examples of Gözlükule are wheel-made and well-fired vessels like the Ovaören examples, and the cross-hatching was painted in brown and red.[32] The earliest examples of local painted pottery in Kilise Tepe were found in the first phase of the 'Stele Building' (IIa–c). Although there is disagreement about the chronological phases of this building, scholars agreed on the fact that the painted tradition appeared in the Late Bronze Age and continued into the Early Iron Age.[33]

It has been suggested that the local painted pottery of Soli Höyük occurs in periods 15 and 13 which were dated to 15th–13th centuries BC.[34] The hatched examples, which were found in the same contexts with the local drab wares, as attested at Ovaören, ceased with a fire marking the end of the Hittite Imperial period at Soli.

Yumuktepe local painted pottery forms, which appeared in Level Va and continued to the end of the Late Bronze Age,[35] are similar to the forms known from Central Anatolia. In Kinet Höyük, another site with a few hatched examples, the painted pottery tradition disappears at the end of the Late Bronze Age.[36]

Similar examples to Ovaören painted pottery were found at Oluz Höyük, located in the Kızılırmak basin. Oluz Höyük hatched examples were found in the 7B layer dated to the end of 13th century BC and beginning of 12th century BC, called 'the Collapse Period of Hittite Culture'.[37]

The hatched pottery at Ovaören was found together with the local pottery forms. This tradition does not continue into the Early Iron Age layer (YH8) which destroyed the layers of the Hittite Imperial period. Ovaören excavations revealed so far no evidence supporting a downfall of the Hittite settlement by destruction or an invasion. Ovaören, lying just outside the Kızılırmak bend, provides important results for the distribution of the painted pottery tradition mostly known from the settlements along the southern borders of the Hittite core area.

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[31] Ünlü 2015, 520–521.

[32] Ünlü 2015, 521, 524, Fig. 3.

[33] Hansen and Postgate 2007, 343–350, Fig. 248; Postgate 2008, 170; Jackson and Postgate 2009, 211–212.

[34] Yağcı 2010, 973, Tab. 1.

[35] Sevin and Köroğlu 2004, 79–81, Fig. 7.

[36] Gates 2010, 70.

[37] Dönmez 2016, 128.

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Late Bronze Age Chronology and Painted Pottery in Inland Southern Anatolia

Alvise Matessi

Abstract

This contribution will focus on Southern Cappadocia and the Konya plain, regions that during the Late Bronze Age defined a semi-periphery of the Hittite domain, subjected to intense Hittite hegemony whilst simultaneously constituting a frontier zone with foreign neighbors and subordinate polities. Archaeologically, the Late Bronze Age in Southern Cappadocia is principally known from excavated strata at Porsuk and, to a lesser extent, Kınık Höyük, while regional surveys have produced abundant data for the Konya plain. In this contribution, I will offer a critical review, and revised version, of the local Late Bronze Age chronology and, in light of this, will evaluate the relevance of painted pottery traditions attested in the region.

Keywords

Hittite pottery, Inland Southern Anatolia, Porsuk chronology, Syro-Cilician Painted Ware, Cilician Red Painted Ware

Özet

Makalemiz, Hitit hükmü altında bulunan, yabancı komşular ve bu hükme tabi yönetimlerin bulunduğu, Geç Tunç Çağı Hitit bölgesinin dış çevresinde yer alan Güney Kapadokya ve Konya Ovası bölgelerine yoğunlaşacaktır. Konya Ovası'nda yapılan yüzey araştırmalarının Geç Tunç Çağı için bolca veri ortaya çıkartmasının yanı sıra, Geç Tunç Çağı Güney Kapadokya Bölgesi'nde bilhassa Porsuk'ta ve nispeten de Kınık Höyük'te kazılan tabakalardan bilinmektedir. Bu makalemizde, yerel Geç Tunç Çağı kronolojisi için eleştirel bir değerlendirme sunacak ve bu bilgiler ışığında boyalı seramiklerin bağıntısını değerlendireceğiz.

Anahtar Kelimeler

Hitit çanak cömleği, İç Anadulu'nun güneyi, Porsuk kronolojisi, Suriye-Kilikia boyalı mal grubu, Kilikia Kırmızı Boyalı mal grubu

Introduction

The regional focus of this paper is Inland Southern Anatolia (**Figure 1**), an area essentially defined by the Konya plain to the west and the Bor-Eregli plain, or Southern Cappadocia, to the east. Archaeologically, the Late Bronze Age is here known from excavated strata at Porsuk, located in the southeastern fringes of the target area, along the northern side of the Taurus. Moreover, a recently begun excavation project at the site Kınık Höyük, located at the feet of mount Melendiz, has produced a few Late Bronze Age data within a limited area. As of yet, no excavations of Late Bronze Age levels have been initiated in the

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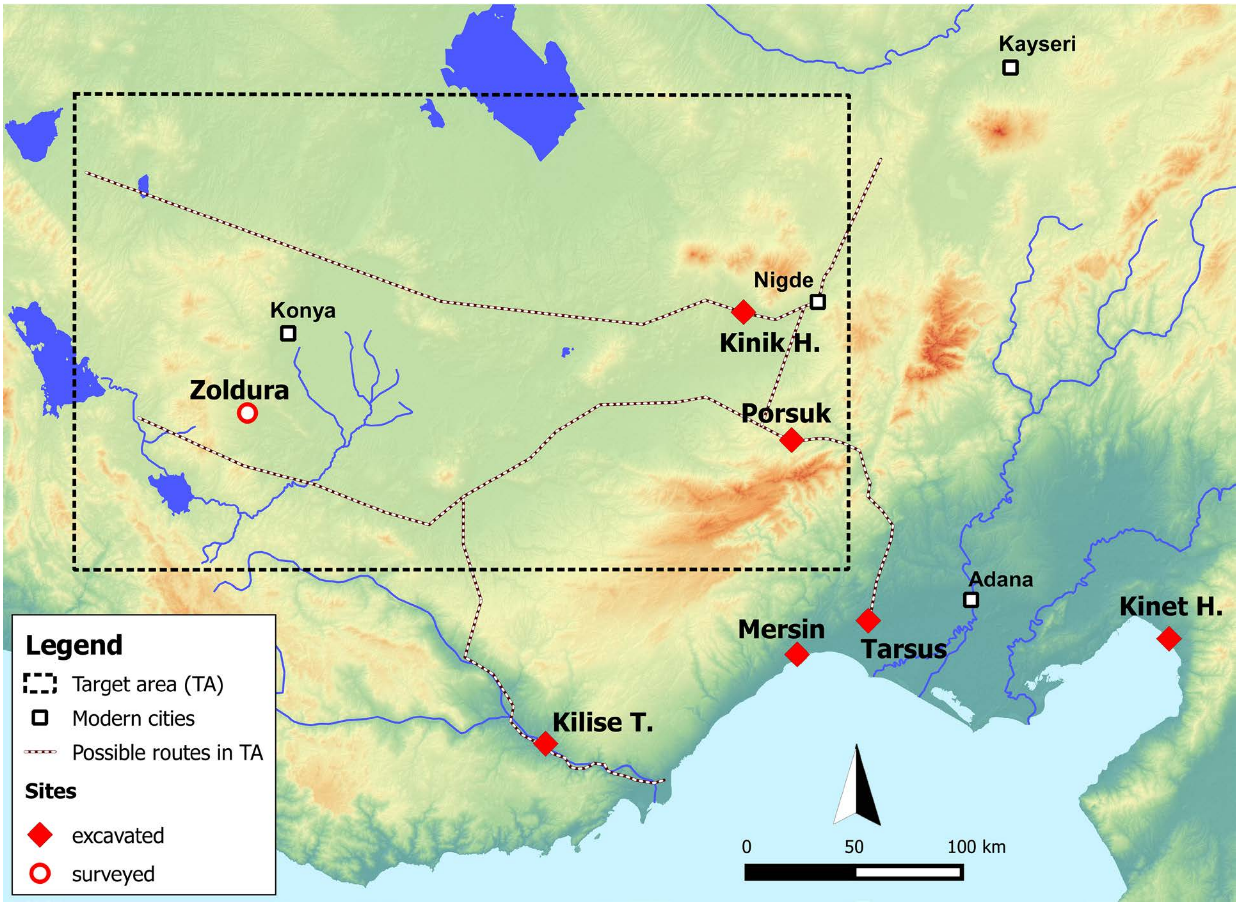

Figure 1: *Map of Southern Anatolia with the target area, relevant sites and possible Late Bronze Age routes. Graphics by the author.*

Konya plain, but this area has been densely and extensively explored through archaeological surveys that have collected a remarkable amount of data across the whole region. Finally, further circumstantial information can be derived from comparison with stratified Late Bronze Age contexts investigated in neighboring regions, chiefly at the sites of Kaman Kalehöyük, Kilise Tepe, Mersin and Tarsus.[1]

From a political point of view, during the Late Bronze Age, Inland Southern Anatolia was subjected to intense Hittite hegemony, but constituted at times a frontier zone with foreign neighbors, chiefly Kizzuwatna up to the late 15th century BC, and the political entities of Arzawa and Lukka in Western Anatolia. Moreover, during the 13th century, the southern Konya plain became the core of the appanage kingdom of Tarḫuntašša, formally subject to Ḫatti but competing with it for supremacy over Southern Anatolia. As recent research has emphasized, this state of affairs resulted in a hybrid political situation between tight territorial integration and indirect hegemonic control that was partly reflected also in the archaeological record.[2] On the one hand, on a macroscopic level, tensions either within the class of local élites or between them and the Hittite central authority is signaled by the high number of Hittite royal landscape monuments punctuating the region. On the other hand, grass-root products of local material culture account for intensive socio-cultural interaction with the Hittite core. In particular, as we shall see, ceramic assemblages from Porsuk almost entirely comply with ‘Hittite’ or North-Central

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[1] For an up-to-date overview on archaeological research on the Late Bronze Age in South-Central Anatolia, see Matessi and Tomassini Pieri 2017.

[2] Recently, Matessi 2016, with further references to previous literature.

Anatolian standards. With all this considered, in her archaeology of the Hittite Empire, Glatz includes inland Southern Anatolia at the southern fringes of the area under the most intensive territorial integration within the Hittite network of power.[3]

Late Bronze Age painted pottery in the Konya plain

How do painted pottery traditions fit into the very general picture just described? Unfortunately, the current state of research does not allow us to address this question with much confidence. Painted pottery traditions are well represented in Late Bronze Age and transitional Early Iron Age sequences from the southern neighbors of the present target area, namely in Cilicia.[4] A key site for the identification and study of these traditions is Kilise Tepe, located in the middle Göksu valley (**Figure 1**), where two superimposed Late Bronze Age occupations, Level III and Level IIa–d, have been detected by the British expedition working there between 1998 and 2011.[5] Level III, whose occupation spans from the late 15th to the mid-14th century, yields the typical standardized pottery repertoire of North-Central Anatolian derivation, as well as one of the richest assemblages of Red Lustrous Wheel-made Ware in Anatolia. Assemblages of red or brown painted pottery started to appear as soon as the latest phases of Level III (phases d–e) and became a dominant class in Level IIa-d, dating to the end of the Late Bronze Age.[6] These include bowls with painted internal rims and a particular class of coarse vessels, mostly handmade, with thick squared rims and red-painted decoration in crude patterns of bands, hatchings and lattices. This category of painted ware has been recognized as a class diffused in other key sites of the final Late Bronze Age in Cilicia, such as Tarsus and Mersin, and for this reason it is now termed the 'Cilician Red Painted Ware'.[7] At Kilise Tepe, the Cilician Red Painted Ware likely developed in the so-termed 'Kindergarten Ware', dominant in the early phases of the Iron Age (Level IIe–f).[8] According to Postgate, the diffusion of coarse red painted ware, their gradual success over standardized 'Hittite' ceramics as well as their continuity into the Iron Age reflects the dissolution of Hittite centralized control over ceramic production, which cleared the field for local traditions to emerge and, eventually, prevail in the course of time.[9]

Considering this situation in Cilicia, it would be interesting to analyse the presence and scale of similar cultural developments in Inland Southern Anatolia as well, but the available evidence provides only limited clues in this direction. A remarkable surface collection of pottery likely related to the Cilician Red Painted Ware is reported from Zoldura-Hatunsaray, in the Southern Konya plain (**Figure 1**).[10] If so, given the position of Zoldura not far from the Karaman-Konya road, the Göksu valley must have represented the most obvious channel for the diffusion of Cilician Red Painted Ware traditions in Inland Anatolia. Significantly, this is the same route of transmission that fueled the circulation of Red Lustrous Wheel-made Ware in Anatolia as well as trading activities between Ḫatti and the Levant.[11]

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[3] Glatz 2009.

[4] See the relevant contributions in this volume by Jean, Ünlü, Yaşin and Aksoy, and Kozal.

[5] Postgate and Thomas 2007; Bouthillier *et al.* 2014.

[6] Lastly, Bouthillier *et al.* 2014, 145, 150–152.

[7] See Sevin and Köroğlu 2004 (Mersin); Ünlü 2005 (Tarsus). One might be tempted to assign to the same class also some of the bowl sherds collected by French (1965, 183, Figs. 10.10–24) at Tekirköy, in the vicinity of Silifke, during his survey in the Göksu valley. Lacking a suitable alternative at the time of his publication, French attributed these sherds to the Late Chalcolithic.

[8] Bouthillier *et al.* 2014, 153; Hansen and Postgate 2007, 345.

[9] Postgate 2007; 2008.

[10] Bahar and Koçak 2004, 20–21, Figs. 46–47.

[11] Kozal 2003; 2007. Most scholars agree that the Hittite port of Ura, entertaining intense commercial relationships with Ugarit, was located at the mouth of the Göksu (lastly, Forlanini 2017, 244–245, with further references). On the role of the Göksu valley within the broader socio-political landscape of Hittite South-Central Anatolia, see Matessi 2016, 143–145.

With the present state of our knowledge, this is as much as we can say for the western part of our target area. The lack of stratified contexts in the Konya plain hinders more in-depth evaluations on the local development of Late Bronze Age cultures and their transformations in the Iron Age. Left with survey data alone, we are also unable to assess even the possible distribution of the Cilician Red Painted Ware as well as of other Late Bronze Age painted pottery traditions known from other neighboring regions, such as Western Anatolia.[12] In fact, their relatively recent identification and definition from stratified assemblages raises suspicions about surface collections from earlier survey projects, where Late Bronze Age painted horizons might have gone unnoticed or assigned to other periods. In fact, as has been observed, poor technology and, in some cases, careless painting make most final Late Bronze Age-Early Iron Age pottery productions across Anatolia very similar to traditions dating back to the Early Bronze Age or even to the Late Chalcolithic and can be easily confused therewith.[13]

In sum, the present state of the art necessitates that the impact of painted pottery traditions on Late Bronze Age cultures of Inland Southern Anatolia must be thoroughly evaluated from relevant stratified data, which are hitherto only available in adequate amounts at Porsuk (**Figure 1**). In what follows, I will review the Late Bronze Age evidence yielded by this site with a particular emphasis on chronology. I will propose a substantial revision of the dates traditionally assigned to its Late Bronze Age occupation, counterchecking absolute dates recently determined upon a reassessment on the ceramic data known from existing publications. This will represent the necessary premise for a balanced analysis and interpretation of the admittedly few, but very significant, examples of painted wares known in the Late Bronze Age ceramic repertoire of Porsuk.

Dating the Late Bronze Age occupation at Porsuk

Porsuk is a 4 hectares tabular mound, located along the modern road between Ulukışla and Pozantı, at the northern entrance of the Cilician Gates, and is therefore considered a strategic post for connections to the Mediterranean. Stratigraphic excavations started in 1969 and continued intermittently up to the present day under the purview of different French projects.[14] Vestiges of Late Bronze Age occupations have been investigated in two areas, located at the western and eastern side of the höyük, respectively.[15] The western area, termed *Chantier* II, yielded parts of an imposing fortification system, comprising a stone socle and a mud brick superstructure. Given the complexity of the fortifications' construction, exact stratigraphic relationships between its different components remain difficult to establish. It seems clear, however, that the fortifications underwent several structural modifications over time. The whole area is sealed by thick burnt layers, possible traces of major fires resulting from a violent destruction. In the eastern area, termed *Chantier* IV, a more definite sequence in two phases was identified. The earliest phase, Level 6, is represented by a thin deposit with few remains of large stone walls, possibly fortifications, razed down to their bare foundations by later builders. The later phase, Level 5, exposed for no more than 700 m^2 along the eastern and southern slope, yielded another defensive system with casemates, storage facilities and a large room termed by archaeologists the '*pièce hittite*'. Also, in *Chantier* IV the Late Bronze Age occupation was likely brought to an end by a major fire, testified by variably thick destruction layers that seal the Level 5 deposits. Leaning against a wall inside the '*pièce hittite*', the archaeologists even found an entire skeleton of a pregnant young woman who, as the paleo-anthropologists report, was killed by the fire and collapse of the structure.[16] In both *Chantier*

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[12] See Dedeoğlu and Konakçı 2015 and their contribution in this volume.

[13] Genz 2005.

[14] Pelon 1970. The excavation, started under the direction of Olivier Pelon, was interrupted in 1989 and reappraised in 2003 by a new project led by Dominique Beyer (Université de Strasbourg). Finally, in 2016, the direction passed to Claire Barat (Polytechnique Hauts-de-France).

[15] For an up-to-date synthesis on the Late Bronze Age finds at Porsuk, see Beyer 2010 and 2015.

[16] Blaizot 1991.

II and *Chantier* IV, structures pertaining to the Iron Age phases sit directly on top of the Late Bronze Age destruction layer, with no intermediate floor or sign of human activity in-between.

Former views based on historical speculations and on outdated interpretations of ceramic finds bracketed the Late Bronze Age occupation at Porsuk squarely within the Hittite Empire period. Accordingly, Porsuk was considered a new foundation of the 14th century that, at the end of the 13th century, went through a violent destruction in the turn of events which elsewhere marked the collapse of the Hittite Empire.[17] This initial understanding, however, has given way to a new picture in the last decades thanks to programs of scientific analysis, which have provided more accurate absolute dates independent from any other circumstantial information.[18] On the one hand, dendrochronological determinations from architectonic beams making up the structure of the western fortifications (*Chantier* II) clearly indicate that their earliest construction activities took place no later than the last quarter of the 17th century BC, almost three centuries earlier than previously supposed. But the most striking results concern the possible end of the Late Bronze Age sequence throughout the entire site. The skeleton lying under the burnt debris of the '*pièce hittite*' is radiocarbon dated to around the early 15th century BC. If the context of this sad finding had been correctly understood, the same date should be assigned also to the collapse of the structure that caused the young woman's death. Consistently, on Level 5 floors underneath destruction deposits outside the '*pièce hittite*' to the west, archaeologists also found cereal stocks that were radiocarbon dated to no later than the mid-15th century BC. According to excavation reports, stratigraphic relationships between these individual finds are not clear enough for general statements about the end of the Late Bronze Age sequence at Porsuk.[19] Nonetheless, taken together, they persuasively point to the lack of a 14th to 13th century occupation on the site, unless we consider that both the young woman's corpse and the cereals were left unclaimed in their final deposition for one or two centuries while life continued in other parts of the settlement.

A look at other finds can help to better contextualizing the end of the Late Bronze Age sequence at Porsuk. The results of the excavations, especially the most recent ones, are still being processed in order to be published in their final form. The only comprehensive study so far available is the ceramic study done by Sylvestre Dupré in 1983 and devoted to the Late Bronze Age and Iron Age finds from the first seven campaigns (1969–1976).[20] For information concerning the most recent excavations, instead, we must resort to regularly published seasonal reports.[21] From these publications, we learn that Porsuk was the findspot of a fair amount of Red Lustrous Wheel-made Ware, a very distinctive ceramic class diffused throughout the Eastern Mediterranean, but probably originating from a single source area generally identified with Cyprus.[22] The long held conviction that Red Lustrous Wheel-made Ware made its first appearance in Central Anatolia no earlier than the 14th century was the main argument for Dupré to assign the Porsuk Late Bronze Age ceramic repertoire to a Hittite Empire horizon.[23] However, recent research has considerably revised this view and demonstrated that the Red Lustrous Wheel-made Ware was already a common feature in Anatolian Late Bronze Age assemblages in the 15th century BC.[24] The Red Lustrous Wheel-made Ware assemblage from Porsuk published or reported upon so far includes seven pieces, among which the profiles of three spindle bottles can be clearly recognized, in addition to a couple of fragments of libation arms.[25] While the latter are too small to be indicative of any class specific typology, the former pertain to a small broad-shouldered type of spindle bottle that had an apex in Late Cypriot IA:2–IB and likely waned from the Red Lustrous Wheel-made Ware shape repertoire by the mid-14th century BC.[26] Two such spindle bottles are reported to have been found in the Late Bronze Age destruction layers of both the eastern and the western areas, and would thus provide a useful chronological clue for the end of the Late Bronze Age sequence at Porsuk.[27] Significantly, the chronological distribution of these spindle bottles fits with available radiocarbon dates for the destruction layer and both concur in placing the end of the Late Bronze Age occupation at Porsuk no later than at the end of the 15th century BC, more than two centuries earlier than previously thought. As we shall see in the next section, a comprehensive re-evaluation of the published ceramic repertoire from Porsuk further corroborates this view, providing firmer clues about the site's chronological framework during the Late Bronze Age.

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[17] See, e.g., Pelon 1991.

[18] Beyer 2015; Kuniholm *et al.* 1992.

[19] Beyer 2015, 107–108.

[20] Dupré 1983.

[21] Excavation reports are published in *Syria* until the 1989 season, and in *Anatolia Antiqua* from the 2003 to the 2014 season.

[22] Eriksson 1993 and, lastly, Grave *et al.* 2014, with references to previous literature. A southern Anatolian origin, precisely at Kilise Tepe, is instead proposed by Kozal (2015) and reiterated through the help of archaeometric analyses in Kibaroğlu *et al.* 2019. Scientific evidence confirming the common origin of the Red Lustrous Wheel-made Ware is dealt with in Knappett *et al.* 2005 and Schubert and Kozal 2007. However, besides 'standard' Red Lustrous Wheel-made Ware, also several instances of local imitation and variations have been identified (e.g. Manuelli 2009).

[23] Dupré 1983, 41.

[24] Mielke 2007, 161–163.

The Late Bronze Age ceramic assemblage from Porsuk: A re-evaluation

As emphasized by recent scholarship, ceramic traditions in Central Anatolia show a high degree of continuity throughout the Bronze Age, so that their evolution can be determined with sufficient confidence only through quantitative analyses of stratified assemblages. This holds especially true for pottery traditions of the Late Bronze Age, whose diachronic evolution are now understood through trends of statistical variation built upon stratified contexts at key sites, chiefly Boğazköy, Kuşaklı and Kaman Kalehöyük.[28] In addition, starting from assemblages from Boğazköy associated with secure absolute dates, Schoop has recently individuated a series of ceramic proxies whose relative frequencies underwent changes that can be charted in a 'master sequence' ranging from the 18th to the 13th centuries BC.[29] In the lack of a recent final report analysing the Porsuk Late Bronze Age pottery through such a quantitative approach, I present here some general considerations based on the repertoire published by Dupré. Besides incurring the risk of becoming obsolete with future publications of the latest finds, this attempt has some methodological limits that are necessary to state at the outset. First, the sample contributed by Dupré for the Late Bronze Age, all deriving from Level 5, amounts to no more than 250 pieces, which could lead to some statistical bias. This amount, in fact, is very small compared to the reference assemblages upon which Late Bronze Age pottery trends are reconstructed, often comprising thousands of pieces. In addition, Dupré provides very little information about the stratigraphic and topographic context of the finds he analysed, which prevents us from assessing differences in the relative diachronic evolution of ceramic assemblages between different sectors of the excavation. For these reasons, a quantitative analysis of the Late Bronze Age ceramic assemblage of Porsuk is not by itself useful for fine-tuned chronological considerations. Nonetheless, its results can be adequately checked against the information discussed in the preceding section in order to provide a more balanced account on the chronological range of the Late Bronze Age occupation at Porsuk.[30]

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[25] Dupré 1983, 25–26, and Pl. 41, nos. 247–250 (spindle bottles and libation arm fragments); Pelon 1992, 341, Fig. 42 (spindle bottle); Beyer *et al.* 2012, 195, Fig. 30 (spindle bottle); Beyer *et al.* 2013, 221, Fig. 38 (libation arm fragment).

[26] Eriksson's Type VIA1a (1993, 22–24, Fig. 5a; 140–142, Fig. 40).

[27] Pelon 1992, 341, Fig. 42 (*Chantier* II); Beyer *et al.* 2012, 195, Fig. 30 (*Chantier* IV). On the same bases, and drawing parallels with the destruction horizon of Kuşaklı, Mielke (2006a, 87–88) proposes dating the destruction of Porsuk to no later than the 14th century BC. His observations, hitherto limited to *Chantier* II, can now be extended also to *Chantier* IV in light of the more recent find.

[28] Katsuno 2006; Matsumura 2005; Mielke 2006b; 2006c; Müller-Karpe 1988; Parzinger and Sanz 1992.

[29] Schoop 2006; 2009; 2011.

[30] The data presented here for Porsuk are drawn from Dupré 1983, 39–40.

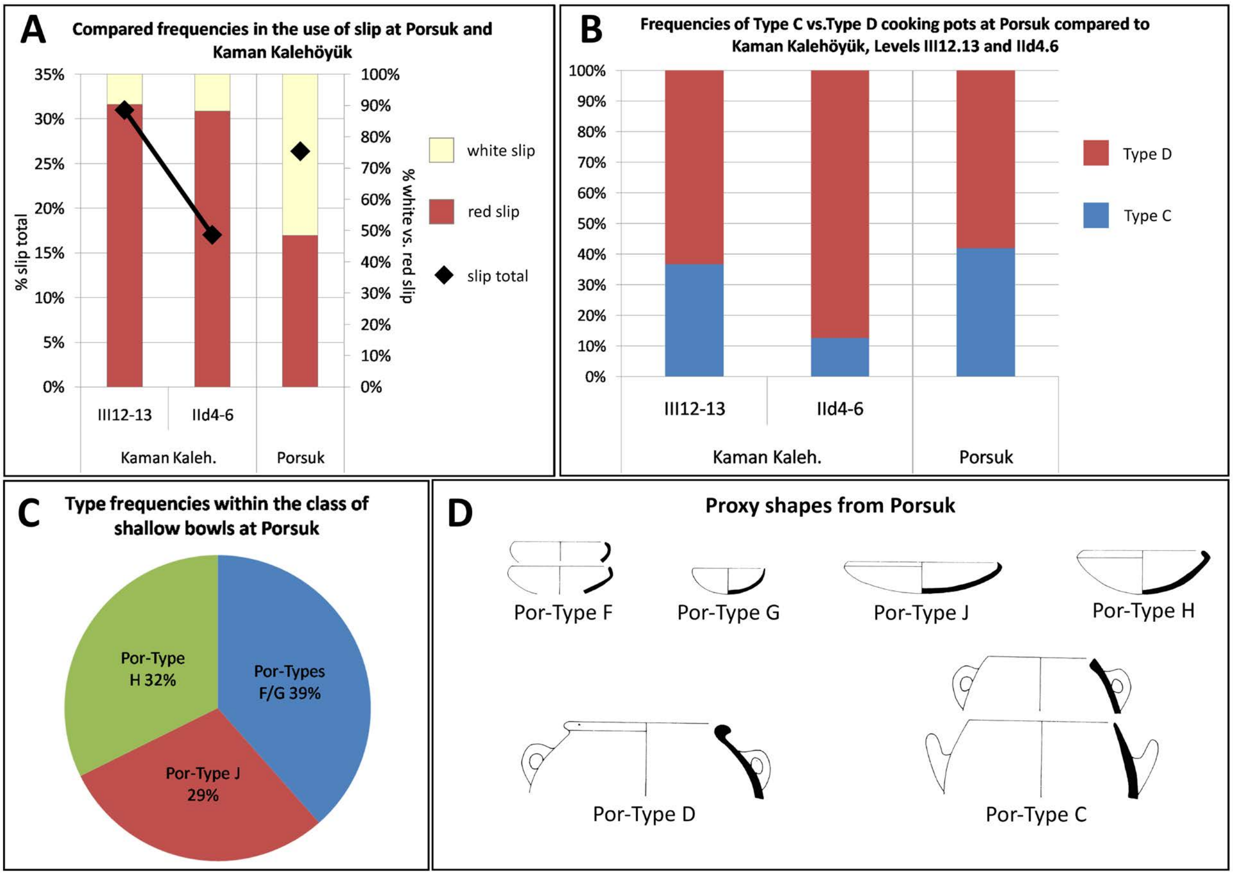

Figure 2: *Frequencies of slip and relevant shapes at Late Bronze Age Porsuk based on Dupré 1983. The Kaman Kalehöyük data used in graph A are drawn from Matsumura 2005, 225–226, Fig. 4.1-3. For those used in graph B, see Matsumura 2005, 281–283, Fig. 4.2–11.*

A first interesting consideration emerges from examining the relative frequency of wares in the published assemblage (**Figure 2.A**). Through the Boğazköy 'master sequence', Schoop has demonstrated that changing frequencies in the use of slip are significant from a chronological point of view.[31] In fact, overall the use of slip seems to steadily decrease over time, but in cases where slip is evident, white slip gradually prevails over red slip. The gradual obsolescence of the use of slip is indeed a general trend in the ceramic production of Late Bronze Age Anatolia that has been observed in other sites, e.g. Kaman Kalehöyük. At Porsuk, slipped vessels amount to as much as 27% of local wares. This figure better complies with the earliest stages of the Boğazköy 'master sequence' (18th–17th century BC), characterized by ca. 20% slipped vessels within the whole assemblage. Similarly, at Kaman the frequency of slips in the early stage is comparable with that seen at Porsuk (III12–13: 32%), while it decreases in the later stage (IId4–6: 19%).[32] The Late Bronze Age assemblage from Porsuk also displays a balance in frequency between red and white coloured slips that complies with the middle part of the sequence at Boğazköy (15th–14th century BC). Conversely, at Kaman, red coloured slips continue being predominant over white slips in later Late Bronze Age phases as well.

From a typological point of view, the inventory of shapes published by Dupré mostly complies with 'Hittite' or North-Central Anatolian standards, with precise correspondences in relevant key

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[31] Schoop 2009, 163, Fig. 8.

[32] Matsumura 2005, 225–226, Fig. 4.1–3.

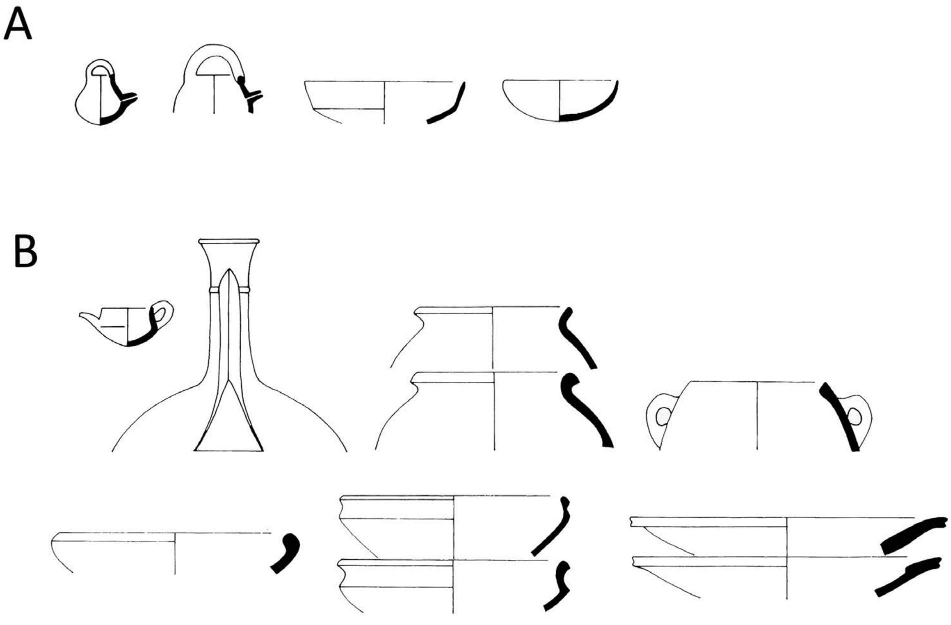

Figure 3: *Sample of types from the Porsuk monochrome local Late Bronze Age repertoire (Dupré 1983, 242). A: types with best comparisons in the 'early horizon' at Kuşaklı. B: types with best comparisons in the 'middle horizon' at Kuşaklı (cf. Mielke 2006b, 160, Figs. 147–149).*

PORSUK		**BOĞAZKÖY**			**KUŞAKLI**	**KAMAN KALEH.**	
Present article	Dupré 1983	Schoop 2006	Parzinger/Sanz 1992	Müller-Karpe 1988	Mielke 2006	Matsumura 2005	Katsuno 2006
POR-Type G	Bols à bord effilé	Type G	Typ I.1.2-3	Typ S12a	Typ S12.h	Typ 111/ Typ 141	Gruppe Sa
POR-Type F	Bols à bord arrondi	Type F		Typ S12b-f	Typ S12.a,g,k		
	Bols à lèvre infléchie						
POR-Type J	Bols à lèvre pointue	Type J	Typ I.3.3b	Typ S5f-h	Typ S5	Typ 14210	
POR-Type H	Bols à lèvre rentrée	Type H	Typ I.3.1	Typ S1	Typ S1	Typ 112/ Typ 142	
	Bols à lèvre ourlée		Typ I.3.3a,c-d				
POR-Type C	Cooking pots sans l.	Type C	Typ B.1	Typ KT1	Typ KT1	Typ 2111/ 2112	verdickter Rand einfacher Rand
POR-Type D	Cooking pots à lèvre	Type D	Typ B.4	Typ KT2	Typ KT2	Typ 2113	abgesetzter Rand

Table 1: *Correspondences between Porsuk ceramic typologies and those individuated in reference Late Bronze Age assemblages. In order to ease comparison within the text, Dupré's relevant classes are here assigned labels modeled upon Schoop 2006.*

assemblages (**Table 1**). Open forms are largely dominant (56% of the assemblage), while jars and cooking pots are the most frequent types among closed forms. At a glance, the Late Bronze Age shape repertoire of Porsuk reveals a somewhat 'archaic' appearance. For example, most comparisons can be found in the 'early' and 'middle horizon' of Late Bronze Age Kuşaklı, while there are no apparent correspondences with the 'late horizon' (**Figure 3**). An analogous picture is obtained by examining the relative frequency of significant types (**Figure 2.D**).

Plain shallow bowls with rounded (POR-Type F) or tapering rim (POR-Type G) are quite common at Porsuk, representing together a tenth of the whole assemblage. In North-Central Anatolia, these types are generally connected with the early sequences of the Late Bronze Age. In fact, they are best represented in the early and middle horizons at Kuşaklı and in the early phases of the Late Bronze Age occupation at Kaman Kalehoyuk.[33] At Boğazköy, their frequency drops between Ob.St. 4 and Ob.St. 2.[34] In his quantitative studies, Schoop has taken the types F and G as proxies of structural change within the Boğazköy assemblage and analysed their diachronic frequency in relation to other shallow bowls types: shallow bowls with inward rim thickening (Type H), and *Schwapprand* bowls with upward-pointing rim thickening (Type J).[35] Schoop has thus shown that types F/G were by far predominant at the beginning of the Boğazköy 'master sequence' (>70%), then dropped to values between 50% and 20% in the middle and later stages (15th–13th century BC). On the other hand, Type J displays an opposite pattern, since its relative frequency increased over time up to become dominant at the end of the sequence (ca. 80%). Looking at the Porsuk published material through the same parameters, we encounter a fair balance between the three corresponding types (**Figure 2.C**), with frequency values around 30% for both POR-Type H and POR-Type J, and 40% for POR-Types F/G. This situation finds a best fit, with very similar values, in the middle stage of the sequence studied by Schoop (15th century BC) and it is in any case very different from the latest stage (13th century BC), where Type H almost disappears.

The most illuminating results, however, are obtained by analysing the frequency of types of cooking pots, which is by far the most common class at Porsuk representing more than a quarter of the published Late Bronze Age repertoire. As elsewhere in Central Anatolia during the Late Bronze Age, cooking pots come at Porsuk in basically two types (**Table 1**): cooking pots with simple rims or internal rim thickening (POR-Type C) and cooking pots with external rim thickening (POR-Type D). The first type represents an older variety, directly deriving from Early Bronze Age and Kārum-period cooking-pots.[36] In most sites, both types C and D feature the whole Late Bronze Age sequence, but changes in their frequency in relation to one another are chronologically relevant. At Kaman Kalehöyük, cooking pots comparable to Type D start to appear in the early Late Bronze Age occupation and later squeeze out Type C cooking pots (**Figure 2.B**).[37] In a similar vein, Schoop has shown that at Boğazköy, Type D becomes largely dominant within the cooking-pots class after the 17th century BC.[38] At Porsuk, however, we still observe a fair balance between the two types, with an incidence of POR-Type D slightly above that of POR-Type C (58% vs. 42%). Again, this pattern virtually complies with the middle part of the Late Bronze Age 'master sequence' and has little to do with its later stages.

To sum up, if reconsidered in the light of recent advances in the study of Late Bronze Age cultural developments in Central Anatolia, available ceramic evidence from Porsuk reflects much older traditions than Dupré had originally thought. The best comparisons can be found with the early and middle horizons of Kuşaklı, with Level III of Kaman Kalehöyük and with the middle part of the 'master sequence' of Boğazköy. The resulting picture is more consistent with the absolute dates and the other chronological data discussed in the preceding section, and thus reinforces their evidence: while starting in the second half of the 17th century, the Late Bronze Age occupation so far investigated at Porsuk hardly continued deep into the 14th century BC. In all likelihood, in accord with the last radiocarbon dates available from the destruction layer, the end of the Late Bronze Age occupation at Porsuk should rather be dated to no later than the end of the 15th century BCE.

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[33] Mielke 2006b, 159–160; Katsuno 2006, 285.

[34] Müller-Karpe 1988, 118 (with the wrong denomination Ob.St. 4 and 3 for Ob.St. 3 and 2 respectively. See Mielke *et al.* 2018, 36, fn. 22); Parzinger and Sanz 1992, 60.

[35] Schoop 2006, 227–228, Fig. 8; 2009, 162, Figs. 6, 167, Fig. 14.

[36] Schoop 2011, 249.

[37] Katsuno 2006, 286, Fig. 9; Matsumura 2005, 281–283.

[38] Schoop 2006, 226–227, Fig. 7B.

The Late Bronze Age painted pottery from Porsuk

As I have briefly anticipated above, beside standard monochrome wares and the Red Lustrous Wheel-made Ware, the Late Bronze Age levels of Porsuk also yielded very few painted sherds, published by Dupré in his catalogue (**Figure 4**).[39] These are: 1) a small shoulder fragment, badly damaged by fire, with lines and geometric motif (**Figure 4.1**), 2) two non-joining shoulder fragments of a single vessel with painted tree motif and vertical lines (**Figure 4.2**), 3) a small pot neck with triple zig-zag over horizontal line (**Figure 4.3**). Due to their poor state and isolation within the Late Bronze Age repertoire, associating these items with any other known ceramic tradition would be little more than a guesswork without the guidance of the chronological frameworks defined above. Sherd no. 1 provides a good starting point for an interpretation. Its decoration, in fact, can be reconstructed as part of a butterfly motif enclosed in metopes. This pattern has good parallels in Syro-Cilician Painted Ware traditions from Cilicia and the Amuq valley, where it is most typically found on the rim of carinated and pedestalled bowls, but also on the shoulder of closed vessels such as pitchers, jars and others (**Figure 4.a–d**).[40] An association with the Syro-Cilician Painted Ware also fits for sherd no. 2, as Dupré himself tentatively suggests.[41] In fact, the motif painted on this sherd is also quite common in Syro-Cilician Painted Ware (**Figure 4.e–f**): a stylized tree likely enclosed in panels and reproduced multiple times on the shoulder of the vessel, as suggested by the vertical lines separating the branches of two different trees on the left fragment.[42]

The affiliation of sherds nos. 1–2 with Syro-Cilician Painted Ware would fit well with the chronology of the Late Bronze Age occupation at Porsuk established here. As it is understood from its name, Syro-Cilician Painted Ware had its core area in Cilicia and in the Northern Levant, where it is known especially from Alalah, Levels XVI–VII, Middle Bronze Age Tarsus and Mersin, Levels XI–IX.[43] Nonetheless, Syro-Cilician Painted Ware's influence spread across a much wider area that included Central Anatolia, as attested by a number of finds in Kārum IV-II at Kültepe-Kaneš and at Acemhöyük, Level III.[44] All these contexts date between Middle Bronze Age I and IIA and on their basis the Syro-Cilician Painted Ware was generally thought to have had its peak in the 18th century BC.[45]

However, examples of Syro-Cilician Painted Ware have also been found at Ras Shamra/Ugarit, Qatna and other Levantine contexts that would point to its survival also in later periods, from Middle Bronze Age IIB to Late Bronze Age I.[46] A longer lifespan of the Syro-Cilician Painted Ware is now confirmed by the recent finding of related specimens in Phase 2 of the so-called Middle Bronze Age II Building at Kinet Höyük, radiocarbon dated to around the late 16th century BC.[47] Therefore, if my interpretation is correct, sherd nos. 1–2 might attest this last phase of the Syro-Cilician Painted Ware (17th–16th century BC) and its continued penetration to the north of the Taurus down to the very beginning of the Late Bronze Age.

Different considerations are needed, instead, for the pot with triple zig-zag on rim (no. 3). This, in fact, can hardly be another example of Syro-Cilician Painted Ware, where paint is usually applied on the shoulder and body of closed vessels, whereas only open shapes are decorated on the rim. Recently, Matsumura has tentatively compared the Porsuk no. 3 with the Cilician Red Painted Ware, where triple

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[39] Dupré 1983, 25, 53 and Pl. 41, nos. 244–246.

[40] On the Syro-Cilician Painted Ware, also called Amuq-Cilician Ware, see Tubb 1981 and, most recently, Bagh 2003.

[41] Dupré 1983, 25.

[42] Heinz 1992, 61.

[43] Bulu 2017; Garstang 1953, 213–215; Goldman 1956, 164–202; Heinz 1992, 54–62; Kozal and Novak 2017, 305.

[44] Özgüç 1950, Pl. LX, nos. 327–328, 331, 340–341, Pl. LXXIX, nos. 616–617; Özgüç 1955, 460, Fig. 29a–b; Öztan 2008, 27, Figs. 1a–b.

[45] Tubb 1981, 405.

[46] Bagh 2003, 225–233.

[47] Gates 2000.

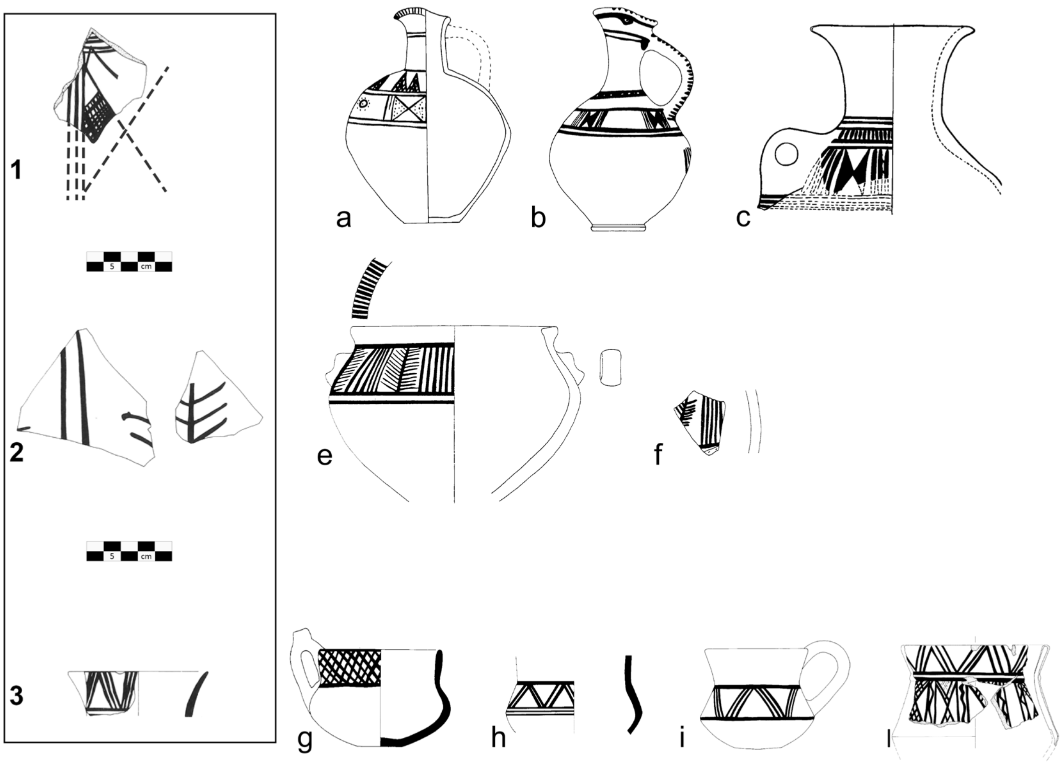

Figure 4: *Painted wares from Late Bronze Age Porsuk (1–3; to scale), with possible comparanda (a–l; not to scale). Syro-Cilician Ware: (a–b, e) Alalah, Level XII; (c) Mersin, Level XI; (d) Tarsus, MBA (Slane's Level A.II); (f) Alalah, Level IX. Other: (g–h) Porsuk, Level IV; Kaman Kalehöyük, Level IId1-3 (i); Kaman Kalehöyük, Level IIII1-11 (l). References: (1) Dupré 1983, Pl. 41 no. 245; (2) Dupré 1983, Pl. 41 no. 246; (3) Dupré 1983, Pl. 41 no. 244; (a) Heinz 1992, Katalog B, Pl. 84b no. 6; (b) Heinz 1992, Katalog B, Pl. 84a no. 2; (c) Garstang 1953, 231, Fig. 148 no. 8; (d) Goldman 1956, Fig. 372 no. 898; Slane 1987, Pl. 41 no. 171; (e) Heinz 1992, Katalog A, Pl. 74 no. 15; (f) Heinz 1992, Katalog A, Pl. 48 no. 139; (g–h) Dupré 1983, Pl. 51 nos. 51 and 50; (i) Matsumura 2005, Pl. 102 no. KL90-2004 (l) Matsumura 2005, Pl. 46 no. KL–P49.*

zig-zags on rim are indeed a very common decorative pattern, although applied prevalently on bowls.[48] Starting from this association, Matsumura further suggests that sherd no. 3 was a Late Bronze Age forerunner of a type of painted mugs well attested at Kaman Kalehöyük IId1–3, dated to the Early Iron Age (**Figure 4.i–l**).[49] The Early Iron Age painted mugs are then interpreted as a later development of Cilician Red Painted Ware traditions in Central Anatolia, parallel to that evidenced by the 'Kindergarten Ware' in Cilicia. It must be noted, however, that no. 3 is described as wheel-made by Dupré, while most known Cilician Red Painted Ware examples are hand-made. Moreover, the chronological revision presented here challenges Matsumura's association, since the Cilician Red Painted Ware does not seem to have developed before the late 14th century, that is approximately one century later than the likely end here proposed for the Late Bronze Age at Porsuk. Consequently, also the comparison with the Early Iron Age mugs is chronologically unstable, because any date for the Early Iron Age occupation at Kaman Kalehöyük can hardly be higher than the 11th century BC.[50] This would leave us with more than three centuries between the end of the Late Bronze Age at Porsuk and the Early Iron Age at Kaman, too large a hiatus to fill with sherd no. 3 alone.

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[48] Matsumura 2008, 43–44.

[49] Matsumura 2005, Pl. 102. Very similar to our Porsuk no. 3 is also Matsumura 2005, Pl. 46, item KL P49, that Matsumura assigns to a mixed Late Bronze Age-Iron Age chronological unit (Fig. 4.i).

[50] Omura 2011, 1101.

Perhaps, in order to interpret Porsuk sherd no. 3, we need to reverse Matsumura's arguments. As a matter of fact, painted mugs akin to those used as comparanda by Matsumura also occur in the Iron Age repertoire of Porsuk, Level 4, also dated to the Early Iron Age.[51] As with the ones from Kaman, the Early Iron Age mugs from Porsuk also bear strong stylistic similarities with no. 3 (**Figure 4.g–h**). Therefore, however disappointing, the wisest solution might be to consider no. 3 as another example of exactly the same type of Early Iron Age mugs. In this case, no. 3 would be an Iron Age intrusion from the upper levels of Porsuk, spuriously included in the Late Bronze Age catalogue by Dupré. Alternatively, with the lack of any reliable comparison matching the chronological spectrum of Late Bronze Age levels at Porsuk, no. 3 would be the sole known remnant of a local painted tradition, active at Porsuk during the first half of the Late Bronze Age.

Conclusions

Traditions of painted ware, termed by scholars Cilician Red Painted Ware after their likely place of origin, developed during the later stages of the Late Bronze Age and possibly spread inland into the Konya plain, where they are attested in unstratified ceramic collections. Their most likely channel of transmission was the Göksu river valley that connected the Karaman area to Cilicia Aspera passing through the site of Kilise Tepe, one of the major findspots of Cilician Red Painted Ware. Unfortunately, the lack of stratified contexts in the Konya plain does not permit a more refined analysis for both the phenomenon itself and its particular trajectories in local ceramic production.

A few painted sherds feature in the Late Bronze Age assemblage from the site of Porsuk, which yielded the only stratified sequence relevant to the period investigated so far in Inland Southern Anatolia. As I have shown in this article, available chronological evidence would bracket the Late Bronze Age occupation at Porsuk between the late 17th and the late 15th centuries BC. On this basis, it is here excluded that any of the painted specimens found at Porsuk belong to the Cilician Red Painted Ware class, which is not otherwise attested before the second half of the 14th century BC. Instead, there are good reasons to associate some Late Bronze Age painted specimens from Porsuk with the Syro-Cilician Ware, a tradition of painted wares which had an apex in the first quarter of the 2nd millennium in Cilicia and the Amuq but continued at least until the late 16th century BC.

The identification of Syro-Cilician Ware in the Late Bronze Age assemblage of Porsuk and, at the same time, the revised chronological reconstruction here proposed are very important for understanding the trajectories of cultural influence active in the Hittite world and their changes through time. On the one hand, Syro-Cilician Ware and Red Lustrous Wheel-made Ware, even though attested in modest amounts, concur to indicate that Porsuk was a node in the transmission of Eastern Mediterranean traditions across the Taurus into Central Anatolia. Given the position of Porsuk, it is clear that the main channel for these contacts was the passage across the Cilician Gates, connecting Southern Cappadocia to the Tarsus plain. On the other hand, the fact that the Late Bronze Age occupation at Porsuk did not continue after the end of the 15th century BC might be a signal of a change in the route during this period and, if so, of major shifts toward other networks in the wake of the coeval reconfiguration of the Hittite State as a cross-regional hegemonic power.

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[51] Dupré 1983, 62–63 and Pl. 51, nos. 43–54. The dating of Porsuk, Level 4 to the Early Iron Age is questioned by Crespin (1999) but would be now assured by strong analogies with the ceramic repertoire of Kaman Kalehöyük, Level IId1–3 (Matsumura 2005, 445–454; 2008).

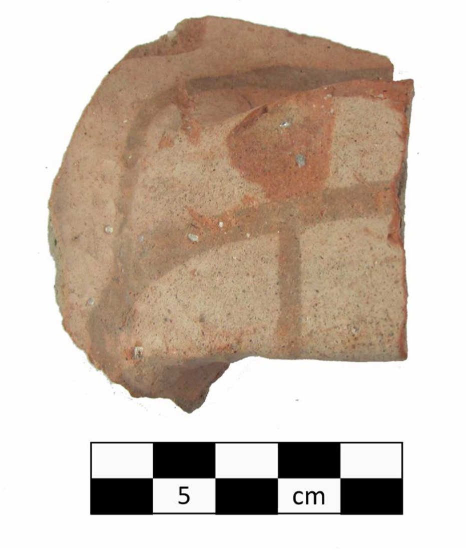

Figure 5: *Possible Late Bronze Age painted sherd from Kınık Höyük. Stratigraphic unit no. C2834; ceramic no. KIN17C.2834.8. Photo by Lorenzo d'Alfonso. © Kınık Höyük Archaeological Project.*

Some short final remarks must be devoted to the site of Kınık Höyük, mentioned in passing at the beginning of this paper. This is a multiperiod mound located at the foot of the Melendiz Dağ, in Southern Cappadocia, along the ways crossing east-west the great Konya basin (**Figure 1**).[52] Excavations started here in 2011 and have so far concentrated on the Iron Age and Hellenistic phases. Nonetheless, the existence at Kınık of an important Late Bronze Age phase is demonstrated by materials found in secondary deposition and, most importantly, by a monumental citadel wall investigated on the northern slope that has a construction phase radiocarbon dated to around the end of the 15th century BC.[53] In 2017, excavations on the southern slope of the mound, to the outside of the Iron Age citadel walls there exposed, have yielded a ceramic assemblage with mixed Iron Age and Bronze Age materials, including the fragment of a painted body sherd with horizontal handle, possibly belonging to the upper part of a large vessel (**Figure 5**). The unit from which this material comes from (C2834) makes up part of a sequence of accumulations rich in chronologically mixed ceramics, covering the surface of the earliest Iron Age rampart of the wall. The painted sherd is handmade with a medium-coarse fabric and shows a reddish-brown painting on white slip. The pattern and style of painting, as well as the general ware characteristics, do not find secure parallels in other periods represented in the assemblage. By converse, they are strongly reminiscent of Cilician Red Painted Ware and other painted ware traditions of the end of the Late Bronze Age. Hopefully, the continuing excavations at Kınık will soon provide better Late Bronze Age contexts and add new pieces of evidence to the understanding of local pottery traditions during this period.

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[52] On the position of Kınık Höyük within the South-Central Anatolian route network, see Matessi *et al.* 2019.

[53] The Kınık Höyük Archaeological Project is directed by Lorenzo d'Alfonso (ISAW-NYU). For a general overview on the results, see Highcock *et al.* 2015; d'Alfonso, Mora and Gorrini 2016.

Mielke, and the other participants. The Turkish version of the abstract is the work of Emre Dalkılıç, while the English was improved through corrections made by Nancy Amelia Highcock: to them I express my gratitude. Obviously, any mistakes are my own.

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The Cross-Hatched Red Painted Pottery Tradition at Mersin-Yumuktepe[1]

Éric Jean

Abstract

During the Late Bronze Age, a majority of the pottery produced in Cilicia consisted of plain ware, the forms of which are related to the Hittite repertoire. Other finds at various Cilician sites, such as bronze weapons and hieroglyphic seals, seem to be markers of the Hittite culture; usually understood as signs of the Hittite political expansion. Nevertheless, that vision must be relativised. On the one hand, plain ware repertoires do not show a homogeneous distribution. On the other hand, locally or regionally made painted wares appear in Late Bronze Age contexts at several sites, which raise the question whether they do not indicate the relative political autonomy of the regions concerned. The most striking example comes from western Cilicia, where cross-hatched painted pottery, mainly consisting of medium-sized jars with squared rims, developed at Kilise Tepe, Soli Höyük and Yumuktepe. That production style suggests micro-regional interactions, as Soli and Yumuktepe seem to have shared a cultural and trade space with Kilise Tepe. In this paper, after dating the painted sherds found at Yumuktepe to the Late Bronze Age II, I address the question of the origin of such painted pottery by suggesting a link between its production and a hypothetical territory of Ura.

Keywords

Late Bronze Age, Mersin-Yumuktepe, Cilicia, red painted pottery, Ura

Özet

Geç Tunç Çağı'nda Kilikia'daki en çok üretilmiş olan seramik Hitit repertuvarıyla ilişkili olan bezeksiz kaplardır. Çeşitli Kilikia yerleşmelerinde, tunç silahlar ve hiyeroglifli mühürler gibi diğer bazı buluntular da genellikle Hitit siyasi genişlemesinin belirtileri olarak anlaşılan, Hitit kültürünün belirleyicileri gibi görülmektedir. Bununla birlikte, bu genel bakış göreceli hale getirilmelidir. Bir taraftan, bezeksiz kapların repertuvarları homojen dağılım göstermemektedir. Diğer yandan birkaç yerleşmede, Geç Tunç Çağı kontekstlerinde bulunan yerel veya bölgesel olarak yapılan boyalı seramikler görünmektedir. Bu durumun ilgili bölgelerde göreceli bir siyasi özerkliğe işaret edip etmediği sorgulanmalıdır. En çarpıcı örnek, esas olarak Kilise Tepe, Soli Höyük ve Yumuktepe'de bulunan orta boyutlu kare ağızlı çömleklerin dış gövdeleri üzerindeki ağ motifli ve ağızları üzerinde çizgili bezemeden oluşan boyalı seramiklerin olduğu batı Kilikia'dan gelmektedir. Bu üretim, Soli ve Yumuktepe'nin Kilise Tepe ile kültürel ve ticari bir alanı paylaştığı görünen mikro-bölgesel etkileşimleri ortaya koymaktadır. Yumuktepe'de bulunan boyalı parçaları Geç Tunç II'ye tarihlendirdikten sonra, üretimi ve Ura'nın varsayımsal bölgesi arasında bir bağlantı önererek, söz konusu boyalı seramiğin kökeni sorununu ele almaktayım.

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[1] This article is the result of the combination of two papers. One was presented on April 4, 2018 at the workshop entitled 'Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State' in the framework of the 11th ICAANE conference held at Munich. To the organisers, Federico Manuelli and Dirk Paul Mielke, a thousand thanks! The second paper was presented on May 24, 2019 at a workshop entitled 'The *Longue Durée* of Ceramic Production across Anatolia, with special mention to the regions of Lycia and Cilicia,' in the framework of 'The Levantine Ceramics Project 2019 Workshop 1' held at Bilkent University in Ankara. Many and sincere thanks to LCP editor Andrea Berlin as well! I also extend my gratitude to Isabella Caneva for giving me the opportunity to work on the material of Yumuktepe.

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 130–146

Anahtar Kelimeler

Geç Tunç Çağı, Mersin-Yumuktepe, Kilikia, kırmızı boyalı seramik, Ura

Introduction

During the Late Bronze Age,[2] a majority of the pottery produced in Southern Anatolia (classical Cilicia) consisted of plain ware, the forms of which are related to the Hittite repertoire of North-Central Anatolia. Other finds at various Cilician sites, such as bronze weapons and hieroglyphic seals, seem to be markers of the Hittite culture, usually understood as signs of the Hittite political expansion. Nevertheless, that vision must be revalued. On the one hand, plain ware repertoires do not show a homogeneous distribution. On the other hand, locally or regionally made painted wares appear in Late Bronze Age contexts at several sites, which raise the question whether or not they indicate a relative political autonomy of the regions concerned. The most striking example comes from Western Cilicia, where red-brown painted pottery, consisting of cross-hatched decor on the exterior body of medium-sized jars with squared rims, developed at Kilise Tepe, Soli Höyük and Yumuktepe (**Figure 1**). Among other groups of pottery, that production style suggests micro-regional interactions, as Soli and Yumuktepe seem to have shared a cultural and trade space with Kilise Tepe.[3] It may therefore shed new light on the relationship between local or regional powers in Cilicia and the Hittite central power. However, according to the first excavator of Yumuktepe, painted pottery was very scarce in Late Bronze Age II levels.[4] Then, in 2004, a significant number of painted sherds found in a newly opened step-trench were published.[5] They were dated to the very end of the Late Bronze Age or to a transition phase between Bronze and Iron Ages,[6] when the same kind of painted pottery is dated to the Late Bronze Age II at Soli and Kilise Tepe. In my unpublished PhD,[7] I questioned this dating at Yumuktepe and hypothesised that this painted pottery dated to the entire Late Bronze Age II, the period of the Hittite Empire. The most recent research suggests such a dating. In order to clarify the positioning of Yumuktepe at the margins of the Hittite State through its cross-hatched red painted pottery, after introducing the site and reminding the arguments for a post-Late Bronze Age II and a Late Bronze Age II dating, I present the new data confirming the second one. Then, I address the question of the origin of such Late Bronze Age II painted pottery, by suggesting a link between its production and a hypothetical territory of Ura.

Mersin-Yumuktepe

Located at 36° 47′ north latitude and 34° 36′ east longitude, Yumuktepe lies 3,5 km west-northwest of the centre of Mersin. The site covers nearly 5 ha, its summit forming a small irregular plateau of about 1 ha (**Figure 2**).

Oval in shape and oriented southeast-northwest, its diameter is 300 m and its summit rises 23 m above the plain (25 m at the time of the first excavations in the 1930s) and 50 m above sea level. Yumuktepe was originally a true coastal site, located near the mouth of the Müftü Deresi, which used to flow several hundred meters east of the höyük during the period of its successive occupations.[8]

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[2] Conventional chronological terminology and Middle Chronology dates are used in this article; for a correspondence with a regional Cilician terminology and Low Chronology as well, see a preliminary presentation in Cilician Chronology Group 2017, 182–183.

[3] Jean 2019–2020.

[4] Garstang 1953, 242.

[5] Sevin and Köroğlu 2004.

[6] Sevin and Köroğlu 2004, 80.

[7] Jean 2010.

[8] See Caneva and Marcolongo 2004, Fig. 2; Sevin and Caneva 1998, 5. The Müftü Deresi ('valley of the müfti') is also known as the Soğuksu ('cold water') and the Efrenk Çayı, in reference to the French occupation of the area after the First World War (Sevin 2004, 16).

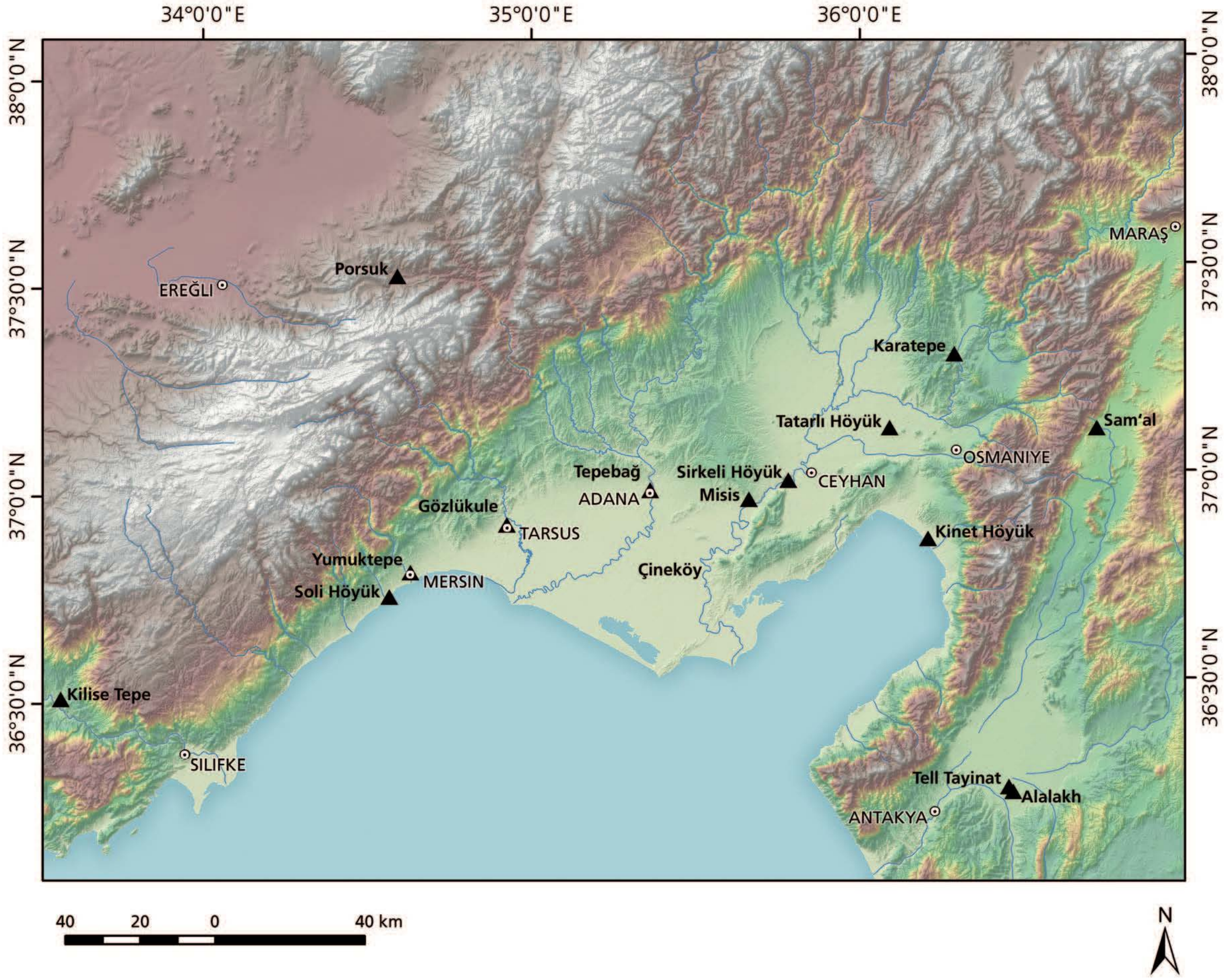
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Figure 1: *Map of Cilicia with sites mentioned in the text, and some modern cities (after Susanne Rutishauser, Cilician Chronology Group 2017, 151, Fig. 1).*

The site has experienced two generations of excavations: John Garstang made the first excavations during the winters of 1937–1938, 1938–1939, 1939–1940 and 1946–1947;[9] nearly fifty years after his last campaign, the excavations resumed in 1993 under the direction of Veli Sevin and Isabella Caneva, and of Isabella Caneva alone from 2001 onwards. While the first project's research was concentrated in the north-western part of the site, the archaeologists of the second project were able to highlight the complexity of the occupation of the höyük by extending their investigations to the south, the east (in a very limited way) and the summit. The 2nd and 1st millennium BC levels excavated in the north-western part consisted of Middle Bronze Age Levels XI to IX, Late Bronze Age I Levels VIII–VII, Late Bronze Age II Levels VI and V, and Iron Age Levels IV and III.[10] Synchronisation between the north-western area and the southern step-trench was established in 1997–1999 from three main features. First: A destruction layer detected upon the last Hittite level in the southern step-trench was equated with Garstang's Level V destruction layer. Second: A fill of several meters in thickness in the southern step-trench has been identified with the platform assigned to Level VII by Garstang (but in use until Level V). Third: The remains of the large wall in the lowest Hittite level of the southern step-trench were

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[9] Garstang 1953, 3–4; Brice 2004.

[10] See Garstang 1953 and a reappraisal by Jean 2006, 324–330; 2010, 194–202. Nothing remained from those levels when the excavation resumed in 1993.

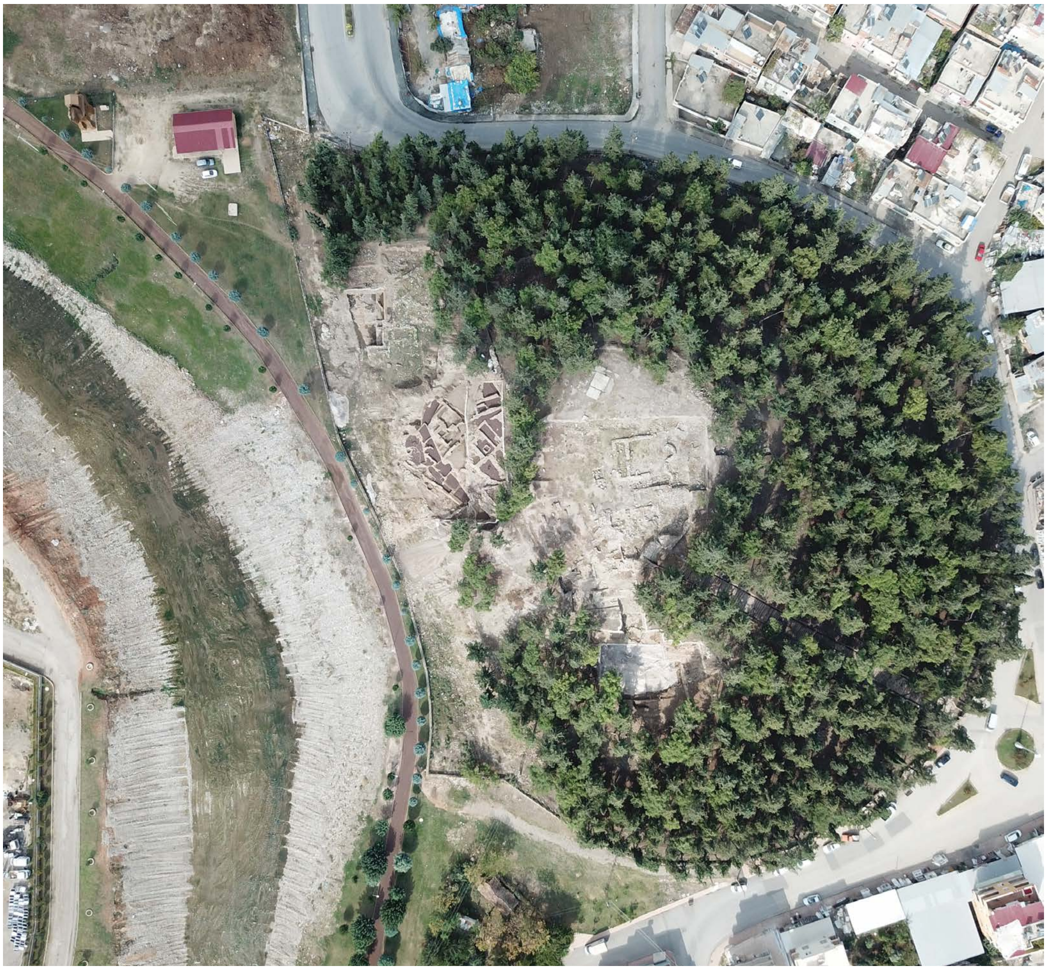

Figure 2: *Satellite photo of Yumuktepe (Photo: Mersin-Yumuktepe Project).*

Periodisation	Approximate Date	Areas of Excavation	Levels
Middle Bronze Age I–II	2000–1550/1500 BC	North-western area Southern step-trench	XI–IX Gap between Chalcolithic and LB I
Late Bronze Age I	1550/1500–1400/1350 BC	North-western area Southern step-trench	VIII–VII IX (–VIII?)
Late Bronze Age II	1400/1350–1200 BC	North-western area Southern step-trench	VI–V VII (preparation: filling and levelling) VI–V

Table 1: *Synchronisation between the levels of the north-western area and the southern step-trench at Yumuktepe.*

equated with hypothetical remains of an enclosure wall of the 'Cilician Hittite' Level IX from Garstang's excavations.[11] However, the pottery suggests a correlation between Level IX of the southern step-trench and Garstang's Level VII. Consequently, I proposed the following synchronisation (**Table 1**).[12]

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[11] Sevin and Köroğlu 2004, 74–76, Tab. 1.

[12] Slightly modified from Cilician Chronology Group 2017, 158; Jean 2010, Fig. 288.

Level V of the southern step-trench was subdivided into two phases, a Phase Va, which would postdate the burnt layer covering an earlier Phase Vb.[13] However, in a first unpublished version of Sevin and Köroğlu's paper, it is stated that Level V had several phases, and mentioned it was impossible to distinguish them clearly because of the subsequent pits and disturbances.[14] This last remark is important in that it is precisely with Phase Va that the history of the cross-hatched red painted pottery began at Yumuktepe.

Cross-hatched red painted pottery at Yumuktepe: a reminder

The first mention of cross-hatched red painted pottery at Yumuktepe appears in the paper by Sevin and Köroğlu,[15] in which the results from the Late Bronze Age levels of the southern step-trench excavated during the 1997–1999 seasons are summarised. Wheel-made and well fired, this group of pottery is characterised by a beige ground (Munsell color: 5YR 6/6; 7,5YR 7/6) and a light brown paint (Munsell color: 10R 5/89), with painted cross-hatched pattern on the exterior body, slashes on the rim, and herring-bone motifs or stripes on the vertical handles (**Figure 3**).[16]

The most popular form is the medium-sized jar, mainly with squared rim. Though petrographic analyses have not yet been undertaken, a macroscopic examination of the sherds suggests local or regional production. According to the authors, all those painted sherds come from Phase Va and would belong to the very end of the Late Bronze Age or a post-Late Bronze period. Such a dating is also based on parallels with similar examples found at Tarsus-Gözlükule, about 40 km further east, and more specifically found in Level II of Kilise Tepe, situated further west at more than 130 km by the main road along the coast, then going up from Silifke through the Göksu valley. However, if the examples from Tarsus-Gözlükule appear to be transitional,[17] those from Kilise Tepe date back to the entire Late Bronze Age II since the revaluation of Levels IIa-d.[18] In addition, the Late Bronze II Level VI.2 from Mersin-Soli Höyük (which lies a few kilometres west of Yumuktepe) provided similar Late Bronze II examples.[19] Returning to the southern step-trench of Yumuktepe, in unpublished reports kindly put at my disposal by Kemalettin Köroğlu, painted pottery is mentioned for Level V but not for a specific phase; in addition, medium-sized jars with squared rim and painted sherds are mentioned for Level VI, though a relationship between the shape and the painting is not specified. Furthermore, the same typical Late Bronze Age II pottery occurs in both Levels VI and V: the Hittite related plain pottery and 'orange ware' characterised by grooved-rim bowls (**Figure 4**), for which parallels were found only at Late Bronze Age II Kilise Tepe and Soli Höyük.[20] On the other hand, from various re-examinations of the Iron Age pottery, it appears there was most probably a gap after Levels V in both the southern step-trench and Garstang's excavations. Indeed, no specific Early Iron Age ceramic was found in the southern step-trench; besides, Christopher Mee

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[13] Sevin and Köroğlu 2004, 75–76.

[14] I thank Kemalettin Köroğlu for bringing this unpublished version of the contribution to my attention.

[15] Sevin and Köroğlu 2004. Actually, Sevin and Köroğlu do not employ the qualifier 'red' but 'light-brown'. I choose to speak of 'red painted pottery' because of the usually red appearance of the paint, and in reference to the labelling of this group as Cilician Red-Painted (CRP) pottery used by Kilise Tepe's team (Bouthillier *et al.* 2014, 105, 138, 152, 157).

[16] Sevin and Köroğlu 2004, 80, Fig. 7, 9–10. The authors of the paper did not provide information about the quantity of this material.

[17] Ünlü 2015; 2005.

[18] Levels IIa-b: ca. 1350–1250 BC; Levels IIc-d: ca. 1250–1150 BC. See Bouthillier *et al.* 2014, 98 Tab. 1, and Postgate in Cilician Chronological Group 2017, 152–153.

[19] Yağcı 2015.

[20] For Yumuktepe: Jean 2019–2020, 12–13, Fig. 2; Sevin and Köroğlu 2004, 79–80 and 82, Fig. 6, 8. For Kilise Tepe: Glatz in Bouthillier *et al.* 2014: 139–142, Fig. 46/l; Hansen and Postgate 1999, 113, Fig. 11–14; 2007, 353, 739, Fig. 395/736–738 (at Kilise Tepe, grooved-rim bowls appear already in Late Bronze Age I Level IIId, and while grooved-rim bowls from Level II received painted stripes on the rim and paint all over the inside for some of them, those from Level III have no painted decoration). Grooved-rim bowls were also found at Tell Açana/Alalakh, but either in gray or pale cream ware, and in Middle Bronze Age II and Late Bronze Age I contexts. I thank Remzi Yağcı and Mara T. Horowitz for bringing to my attention the existence of grooved-rim bowls at Soli Höyük and Tell Açana/Alalakh respectively.

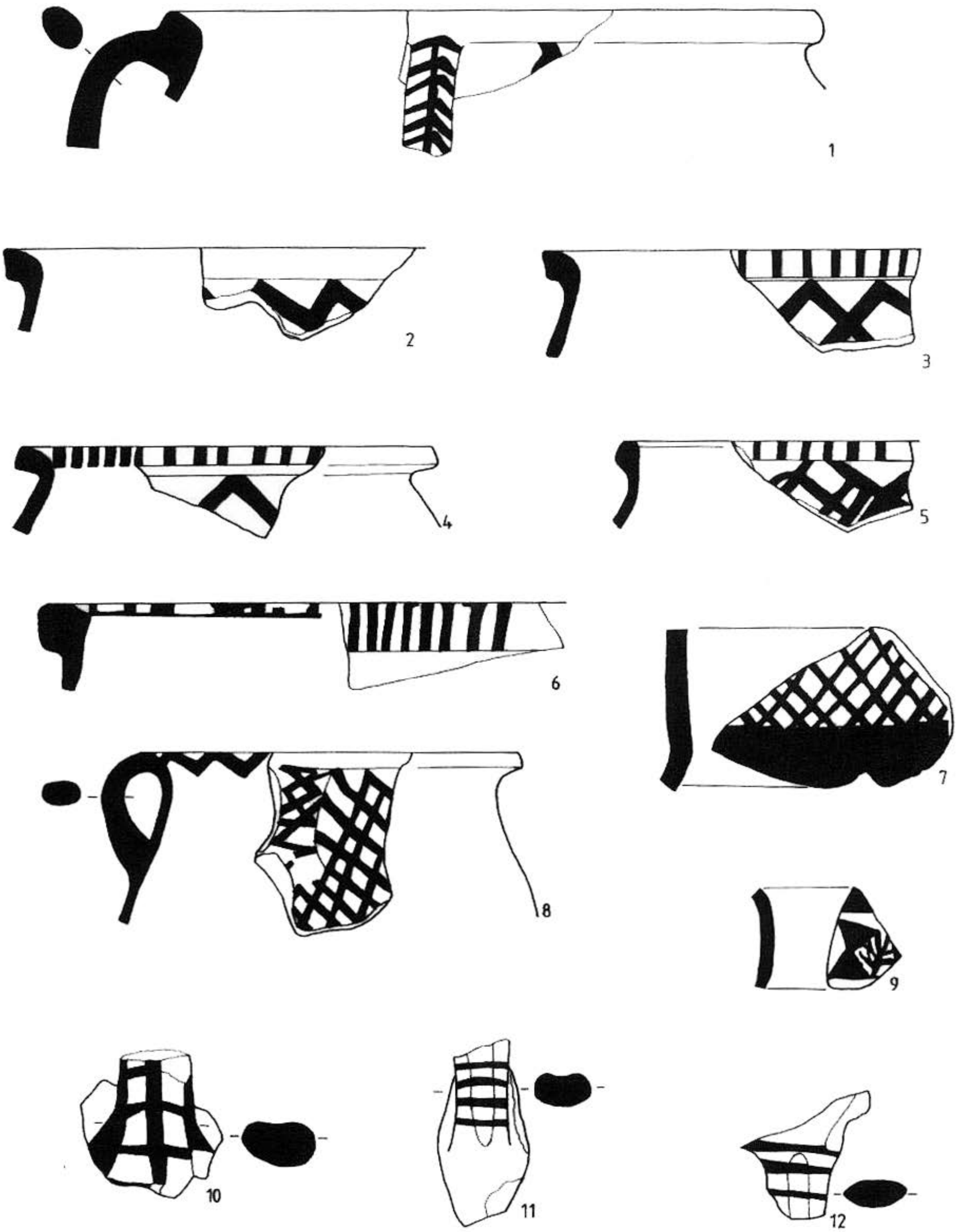
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Figure 3: *Painted pottery from the southern step-trench (after Sevin and Köroğlu 2004, 81, Fig. 7).*

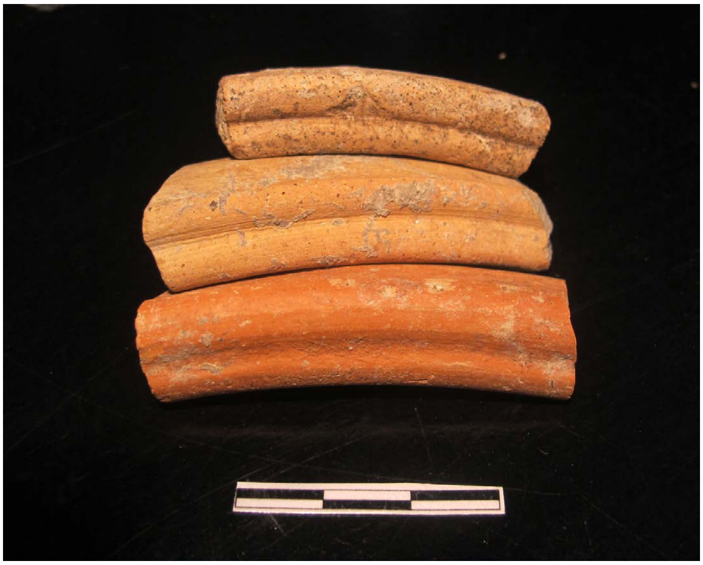

Figure 4: *Grooved-rim bowls in 'orange ware' from the southern step-trench (Photo: Mersin-Yumuktepe Project).*

recognised no specific ceramic from the 12th century BC in his revaluation of 'Mycenaean', 'Helladо-Cilician' and 'Sub-Mycenaeans' pottery from Garstang's excavations and Gjerstad and Seton-Williams surveys.[21] Furthermore, when continuity of Hittite related plain pottery is visible in Late Bronze III/Iron Age Ia levels of most Cilician sites,[22] together with the occurrence of Late Helladic IIIC pottery (even if very rare), at Yumuktepe there is a complete change in the ceramic production between Levels V and IV according to Fitzgerald,[23] and no Late Helladic IIIC. Moreover, according to Barnett, while pottery of Level III dated from the 7th–6th centuries BC, most of the pottery of Level IV dated to the 8th century BC and no effective occupation between 11th and 9th century BC could be proved.[24] These remarks argue in favour of dating the cross-hatched red painting to the Late Bronze Age II, as do some new data.

Cross-hatched red painted pottery at Yumuktepe: new data

In 2015 and 2016, excavations were conducted in squares T13 and T14, located near the summit of the höyük and connected to the southern step-trench by two walls, whose building in later times required cutting into earlier levels (**Figure 5–6**).

Excavation in the fill remaining from those earlier levels revealed four phases of occupation, each phase measuring about 40 cm in thickness (**Figure 6**).

While Late and Middle Iron Age pottery came out from Phases 1a and 1b respectively, Phase 1c, consisting of a pit, provided mixed Late Bronze Age (very few) and Middle Iron Age material. As for Phase 2a, it provided typical sherds from Late Bronze Age II pottery at Yumuktepe: Hittite related plain ware (especially inverted rim bowls), grooved-rim bowls, Cypriot White Slip II (one fragment), together with several cross-hatched painted sherds from medium-sized jars (**Figure 7**).[25]

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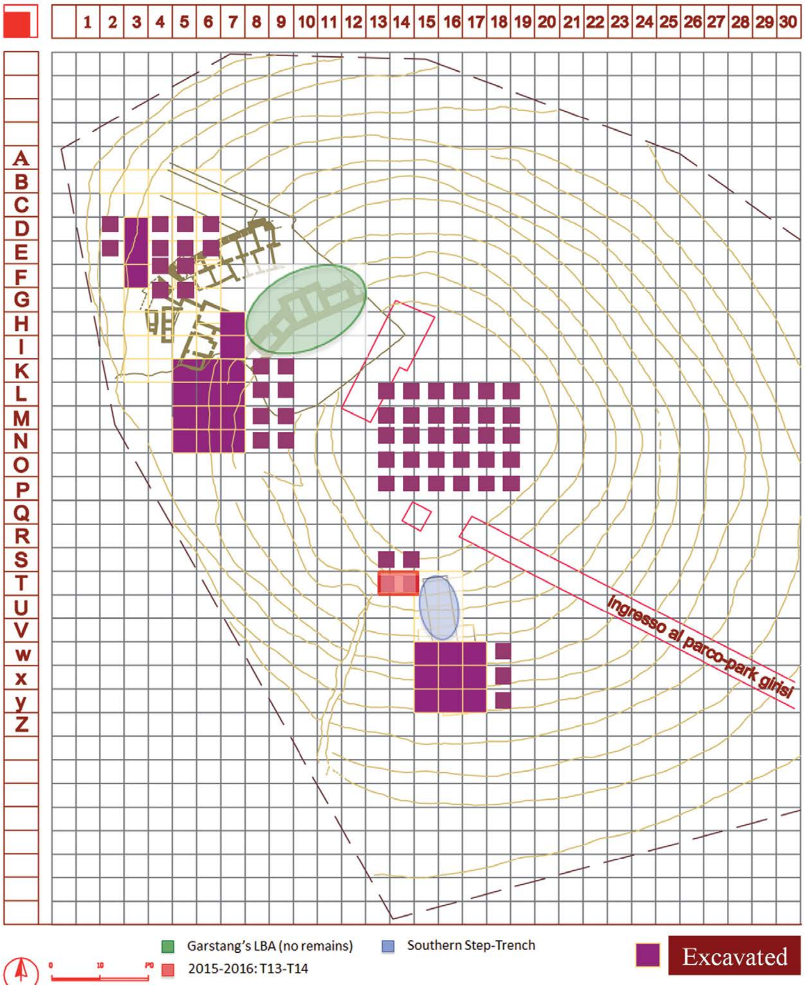
[21] Mee 1978, 133, 150; Gjerstad 1934, 195, Fig. 18; Seton-Williams 1954, 134.

[22] Even when it comes to a 'degenerated' Hittite related pottery like in Kinet Höyük (see Gates 2006, 307; 2007, 690–691; 2008, 285).

[23] Fitzgerald 1940, 131.

[24] Barnett 1940, 98 and footnote 3.

[25] Cross-hatched painted sherds would approximately represent 7% of the entire Late Bronze II assemblage of Phase 2a (Tülay Özaydın pers. com.).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ingresso al parco-park girisi
Garstang's LBA (no remains)
Southern Step-Trench
2015-2016: T13-T14
Excavated
0
10

Figure 5: *Topographic plan of Yumuktepe with excavated areas mentioned in the text (Plan: Mersin-Yumuktepe Project).*

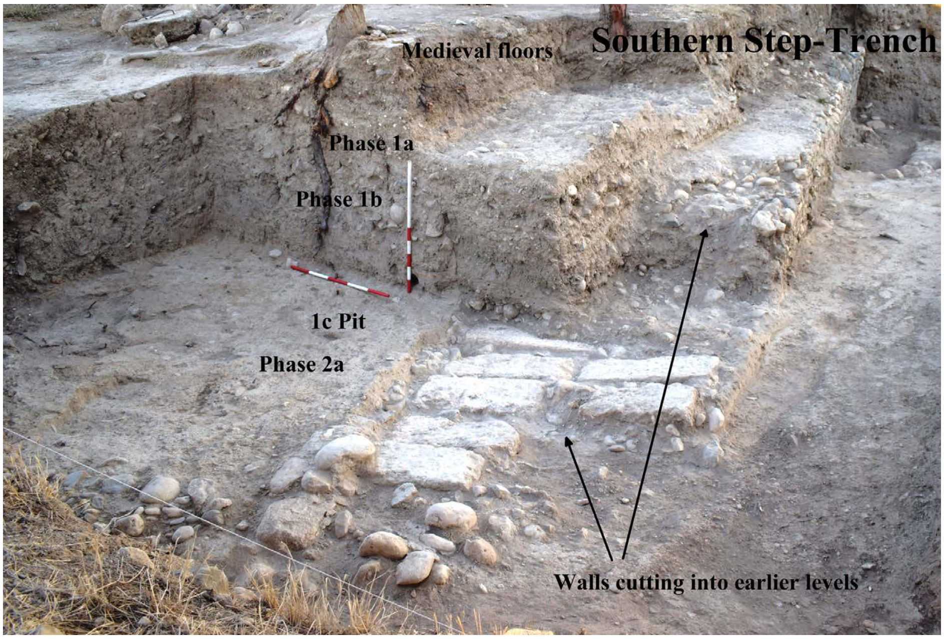
Southern Step-Trench
Medieval floors
Phase 1a
Phase 1b
1c Pit
Phase 2a
Walls cutting into earlier levels

Figure 6: *Area excavated in 2015–2016: T13-T14 (Photo: Mersin-Yumuktepe Project).*

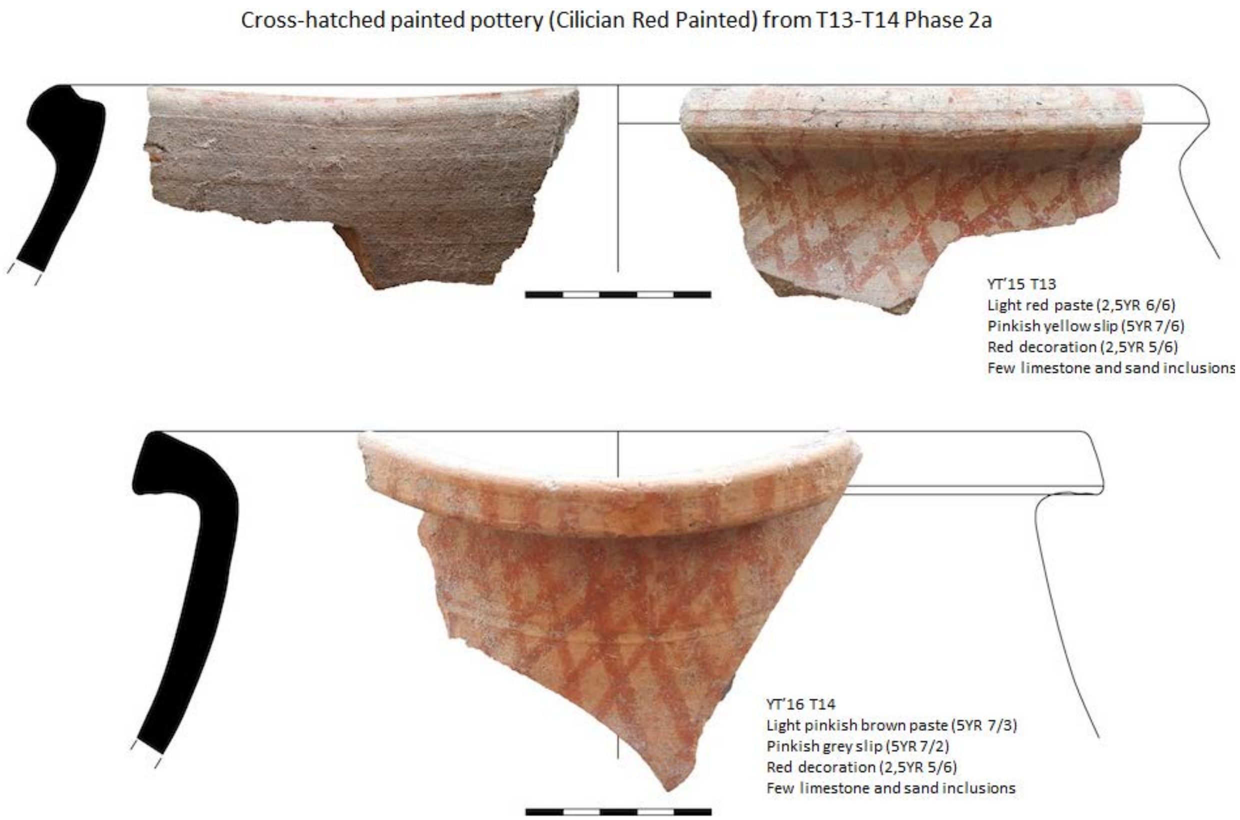
Cross-hatched painted pottery (Cilician Red Painted) from T13-T14 Phase 2a
YT'15 T13
Light red paste (2,5YR 6/6)
Pinkish yellow slip (5YR 7/6)
Red decoration (2,5YR 5/6)
Few limestone and sand inclusions
YT'16 T14
Light pinkish brown paste (5YR 7/3)
Pinkish grey slip (5YR 7/2)
Red decoration (2,5YR 5/6)
Few limestone and sand inclusions

Figure 7: *Painted pottery from T13-T14 Phase 2a (drawings by Tülay Özaydın and digitalisation by Kudret Sezgin).*

In addition to these results, an initial examination of Garstang's archives kept at University College London leads to some preliminary conclusions.[26] Though Fitzgerald's descriptions are limited and his sketches very small in his notes,[27] it appears that, in both Levels VI and V, there were small and medium-sized jars with squared rims, and some grooved-rim bowls (which are absent in the reports and publication of Garstang's excavations). Decorated sherds also occurred in Fitzgerald's notes, and belong to different shapes of vases, possibly including jars with squared rims. They are painted in red, sometimes black, with cross-hatched pattern on the body, stripes or herring-bone motifs on some handles, stripes on the rim of bowls, wavy-line and band motifs below the rim of bowls and other types of vessels. It also appears there were more painted vases in Level V than suggested by Garstang,[28] though probably less than in Level VI.

As a consequence, it appears more and more obvious that cross-hatched red painted jars, including square-rimmed jars, belong to Late Bronze Age II at Yumuktepe, most probably to both Levels VI and V. Was that painted pottery a tradition and is it possible to trace its origin?

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[26] From January 23–27, 2017, Isabella Caneva and I had the opportunity to examine Garstang's archives at University College London. I wish to thank Collections Manager Ian Carroll and Senior Lecturer and Keeper of Collections Dr. Rachael Sparks for facilitating access to the archives, as well as Mandy Wise of UCL Special Collections for her assistance and kindness during our work.

[27] Information about the pottery of Levels VI and V was found in Fitzgerald's unpublished 'Pottery Book' written during the excavations' season of winter 1937–1938, and stored among Garstang's archives at University College London.

[28] Garstang 1953, 242.

Painted pottery traditions at Yumuktepe and the question of the origin of the cross-hatched red painted tradition

Painted pottery occurs in all 2nd millennium BC levels at Yumuktepe, from Middle Bronze Age I to Late Bronze Age II. Were the cross-hatched red painted jars the result of local continuity, the re-emergence of local old traditions, or the result of external influence? When comparing the painted pottery mentioned in Middle Bronze Age Levels XI–IX to that of Late Bronze Age I Levels VIII–VII of Garstang's excavations, continuity and change in form and decoration are visible, which suggest some local evolution from the Middle Bronze Age Amuq-Cilician painted tradition to the Late Bronze Age I painted pottery. Such an evolution depended on regional and supra-regional cultural trends. Indeed, during the Middle Bronze Age, Yumuktepe was eastern oriented with the Amuq-Cilician painted ware tradition, while it appeared northern oriented with the shapes of its Hittite related plain ware from Late Bronze Age I onwards. Another fact is that the Late Bronze Age II production of cross-hatched red painted square-rimmed jars is limited to Kilise Tepe, Soli Höyük and Yumuktepe,[29] thus defining a western micro-region in Cilicia while, at only 40 km further east of Mersin, Tarsus-Gözlükule experienced a different Late Bronze Age II tradition with the Buff Painted Ware.[30] As already said, the occurrence at Tarsus-Gözlükule of cross-hatched red painted sherds, among other motifs such as bands and wavy-lines (which derive perhaps from the Late Bronze Age II buff painted tradition), dates from the Late Bronze III/Iron Age Ia. Besides, apart from the most common form, the square-rimmed jar, Kilise Tepe provided the most varied repertoire of decorated shapes. All together these elements suggest a movement during the Late Bronze Age II from the Göksu valley or Rough Cilicia (Kilise Tepe) to the western end of Plain Cilicia (Soli Höyük and Yumuktepe) and later to Tarsus-Gözlükule (**Figure 8**). But did that movement initially originate from Rough Cilicia or from somewhere else?

Remzi Yağcı first proposed an origin in the region of Malatya,[31] where cross-hatched painted jars were found in Period VB of Arslantepe, dated to ca. 1700–1500 BC.[32] But, as indicated by Federico Manuelli, shapes and decorative motifs at Arslantepe derived from multiple interactions, and connections involving both the Northern Mesopotamian Khabur Ware and the Amuq-Cilician painted ware.[33] So, instead of seeing a prototype of the Cilician Red Painted pottery at Arslantepe or somewhere else, I would rather think in terms of exchanges and mutual influences. In addition, an essential point must be emphasised, namely that the painted vases from Arslantepe are partly contemporary of the Amuq-Cilician Painted Ware that is absent or almost absent at Kilise Tepe and in the Göksu valley, from which the Late Bronze Age II cross-hatched Cilician Red Painted pottery seems to develop. How could a Middle Bronze Age II-Late Bronze Age I tradition from Arslantepe reach Rough Cilicia and the western part of Plain Cilicia without getting through and leaving traces in the eastern and central parts of Cilicia?

Yumuktepe (and Soli Höyük as well) is located precisely at the intersection of two different painted traditions from two different periods: the Middle Bronze Amuq-Cilician tradition, which opposes Plain Cilicia to Rough Cilicia (east versus west), and the Late Bronze II Cilician Red Painted tradition, which opposes Rough Cilicia and the area of Mersin to the rest of Plain Cilicia (west versus east). From a historical point of view, it is noteworthy that the Cilician Red Painted tradition began much before the fall of the Hittite kingdom and before the foundation of the kingdom of Tarḫuntašša by Ḫattušili III as well. It developed when Cilicia was the most widely open to the external world, though in a limited

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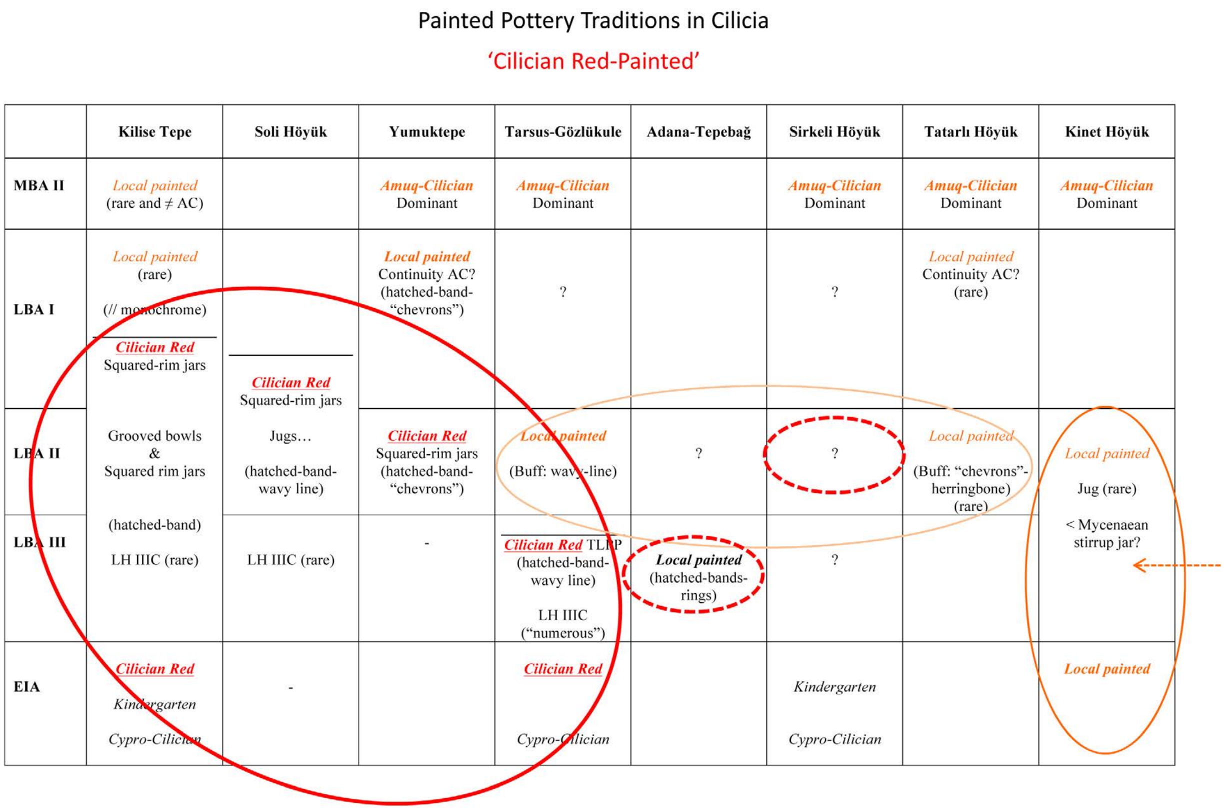
[29] One fragment was found at Late Bronze Age II Sirkeli Höyük (I thank Ekin Kozal for bringing this information to my attention). Nevertheless, one fragment does not make a tradition.

[30] Karacic forthcoming; 2014, 160, Fig. 54, 196–206, Fig. 76–81, 381–403, Fig. 134–141. For an overview of Late Bronze Age painted traditions in Cilicia, see Jean 2019–2020.

[31] Yağcı 2015, 508–509, Fig. 23.

[32] Manuelli 2013, 139–141, Fig. III.36/16, Pl. II/4.

[33] See the article presented by Manuelli in this volume and Manuelli 2013, 409–410.



Painted Pottery Traditions in Cilicia

'Cilician Red-Painted'

	Kilise Tepe	Soli Höyük	Yumuktepe	Tarsus-Gözlükule	Adana-Tepebağ	Sirkeli Höyük	Tatarlı Höyük	Kinet Höyük
MBA II	*Local painted* (rare and ≠ AC)		***Amuq-Cilician*** Dominant	***Amuq-Cilician*** Dominant		***Amuq-Cilician*** Dominant	***Amuq-Cilician*** Dominant	***Amuq-Cilician*** Dominant
LBA I	*Local painted* (rare) (// monochrome) ***Cilician Red*** Squared-rim jars	***Cilician Red*** Squared-rim jars	***Local painted*** Continuity AC? (hatched-band-"chevrons")	?		?	*Local painted* Continuity AC? (rare)	
LBA II	Grooved bowls & Squared rim jars (hatched-band)	Jugs… (hatched-band-wavy line)	***Cilician Red*** Squared-rim jars (hatched-band-"chevrons")	***Local painted*** (Buff: wavy-line)	?	?	*Local painted* (Buff: "chevrons"-herringbone) (rare)	*Local painted* Jug (rare) < Mycenaean stirrup jar?
LBA III	LH IIIC (rare)	LH IIIC (rare)	-	***Cilician Red*** TLRP (hatched-band-wavy line) LH IIIC ("numerous")	***Local painted*** (hatched-bands-rings)	?		
EIA	***Cilician Red*** *Kindergarten* *Cypro-Cilician*	-		***Cilician Red*** *Cypro-Cilician*		*Kindergarten* *Cypro-Cilician*		***Local painted***

Figure 8: *Chart with hypothetical diffusion of Cilician Red Painted pottery.*

way compared to some Levantine regions, as seen through the presence of Late Bronze Age II imported pottery. It appeared at Yumuktepe and Soli Höyük more or less in the period when Kizzuwatna became or was already a Hittite province, which may seem paradoxical as the two sites belonged to Kizzuwatna. Indeed, how may the affirmation of a micro-regional identity through the production of the Cilician Red Painted pottery be understood at a time of diminished political independence?

At the beginning of the 2nd millennium BC, the main trade routes were terrestrial; from the written sources, especially the documentation of Ugarit, and the discovery of shipwrecks it may be inferred that maritime routes developed during the Late Bronze Age. As Hittites needed access to the Mediterranean, they needed Cilician ports. So, could not Cilician port and market cities have gained in autonomy specifically because the Hittites needed them? This would explain a 'soft power' from the Hittites, in particular in the west, where Kilise Tepe, on the one hand, Soli and Yumuktepe, on the other hand, were most probably in close connection with Ura and its territory.

Mersin-Yumuktepe at the margins of the Hittite State: a link with an Ura territory?

The Hittites were not a seafaring people but, for economic and military reasons, they needed a navy, which could be supplied or organised by their allies and the countries that were subject to them.[34] From the documentation of Ugarit, Ura is well known as a market port city of the Hittite king.[35] In order to supply wood for the shipbuilding, the city needed a hinterland territory in charge of forest exploitation. An interdependent relationship connected mountainous hinterland and port cities in general, and Ura in particular, as the major maritime outlet of the Hittites.[36] The location of Ura is not known yet but, among the various proposals, a localisation near Silifke, perhaps in the alluvium of its delta, in any case near the mouth of the Göksu river seems to me the most plausible.[37] Forlanini compared the names of the cities or places of origin of 'The Elders of the city' (Ura) from the Hittite documentation with classical place names.[38] As a result of Forlanini's comparisons, Casabonne defined a territory controlled by Ura, whose possible borders would have been: the region of Laranda (Karaman) and the Sertavul pass to the north; the border zone with Kizzuwatna to the east, at Lamiya according to the Sunaššura treaty, which means near classical Lamos, today's Limonlu river; as for the western border in the 13th century BC, it would have depended on the limits of the kingdom of Tarḫuntašša.[39]

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[34] Casabonne 2005, 68–69. See also Sir Gavaz 2018.

[35] See for instance Lackenbacher 2002, 154–155 (RS 17.130 = PRU IV: 103–105 and Pl. XV; RS 17.316 = PRU IV: 190 and Pl. XL). According to Etienne Van Quickelberghe's brilliantly argued hypothesis, the city of Ura could be mentioned in the seals of Nerikkaili, who was to be the son of king Ḫattušili III, and possibly governor of Ura (Van Quickelberghe 2019). If this function of Ḫattušili's son were confirmed, it would emphasise the importance of the city in the eyes of the Hittites.

The generally accepted borders of Tarḫuntašša are those of Hawkins' interpretation of the Bronze tablet found at Boğazköy. According to the scholar, the 'eastern frontier (of Tarḫuntašša) did abut on Kizzuwatna, and thus must have run south from the Toros-Bolkar Dağ to the sea, presumably somewhere between Mersin and Silifke', an area which may refer again to the Limonlu river.[40] But, as Casabonne reminded us, nothing in the tablet indicates that Tarḫuntašša and Kizzuwatna were neighbouring on the coast. On the other hand, a distinction appears in the documentation of Ugarit between the merchants of Ura and those of the king of Tarḫuntašša,[41] which leads Sylvie Lackenbacher to write: '(...) certains marchands sont-ils dits "du roi" ou "de la reine": "marchands de mon Soleil", "du roi de Tarḫuntašša", "de la reine de l'Ugarit"'.[42] When discussing the borders of Tarḫuntašša, Ali and Belkıs Dinçol with Jak Yakar and Aviya Taffet were the first to develop the idea of a territory of Ura,[43] an idea taken up by other scholars, among them Olivier Casabonne and Craig Melchert.[44] All those scholars, and de Martino as well, agreed about a south-eastern boundary of Tarḫuntašša on the coast at Šaranduwa, based on the reading of the treaty between Tutḫaliya IV and Kurunta and the Ulmi-Tešub treaty.[45] After Gurney, Dinçol *et al.* identified Šaranduwa with classical Celenderis (today Gilindere/Aydıncık), an identification accepted by Freu and developed by Melchert.[46] For Dinçol *et al.*, the eastern frontier of Tarḫuntašša would have gone down from the Taurus, then follow the Göksu river and cross it to join Gülnar to the south until Šaranduwa/Aydıncık.[47] For Craig Melchert, 'the boundary followed the course of the Kalykadnos/Göksu for some distance before turning southwest towards Šaranduwa/Gilindere, then the relief of Keben could well mark the frontier of Tarhuntassa'.[48] Such a mark would situate Kilise Tepe very near the border, but on the side of Tarḫuntašša, as the site lays some kilometres upstream the relief of Keben, whereas a border somewhat upstream Keben, as apparently suggested by Dinçol *et al.* (see above), would rather place Kilise Tepe outside Tarḫuntašša and, by consequence, inside the territory of Ura. This last proposal finds support in Casabonne's hypothesis of an identification of Šaranduwa with Selinonte (today Gazipaşa).[49] After discussing the possibility Selinonte could have derived from Šaranduwa,[50] Casabonne noted the illuminating parallel with the situation of the region during the middle of the 6th century BC: 'il importe de rappeler ici que Kiršu est qualifiée, dans la chronique néo-babylonienne de Nériglissar, de "ville royale des Ancêtres" d'Appuašu, dynaste du Pirindu (Cilicie Trachée) en 557/556, dont la métropole est Ura et la frontière occidentale Sallunê/Sélinonte. (…) Même si aucun niveau antérieur à la fin du VIIe siècle av. J.-C. n'est véritablement attesté à Meydancıkkale, on peut déduire que Kiršu était occupé avant l'intervention néo-babylonienne dans la région et que, depuis longtemps, elle était liée à Ura'.[51]

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[36] Casabonne 2005, 69–70. See also Bryce: 'Ura (...) served also as a major redistribution centre, playing an important role in the provisioning of the Hittite world, particularly in its final decades' (Bryce 2002, 91). The aforementioned relationship would relate 'Cilicians' from hinterland to those from coastal regions.

[37] As already proposed by Lemaire 1993.

[38] Forlanini 1988.

[39] See Casabonne 2005, 70–71; Forlanini 1988. About the Sunaššura treaty (KBo I 5) see Goetze 1940, 48–60. The notion of territory could have included a maritime space, for which the Dana island could have represented an important base, though there is no archaeological evidence of a Hittite presence in the island (see Öniz 2018). The Dana island lies about 40 km south-southwest from Silifke, and just over 2 km (1,08 nautical miles) from the coast.

[40] Hawkins 1995, 52; 1998, 31. For the Bronze tablet, see Otten 1988.

[41] Casabonne 2005, 71.

[42] Lackenbacher 2002, 149. For the 'merchants of Tarḫuntašša', see Lackenbacher 2002, 161–162 (RS 17.158 = PRU IV, 169–170 and Pl. XXI); 162 (RS 17.42 = PRU IV, 171–172, Pl. III).

[43] Dinçol *et al.* 2000; 2001. The authors localise Ura at classical Corycus (Dinçol *et al.* 2000, 14-15; 2001, 82–83).

[44] Both authors argue in favour of a localisation of Ura near Silifke. See Casabonne 2005 and Melchert 2007.

[45] Casabonne 2005, 71–72; Dinçol *et al.* 2001, 82–83; de Martino 1999, 297–298; Melchert 2007. Treaty of Tudhaliya IV with Kurunta: Bo 86/299 I 49-66. Treaty with Ulmi-Tešub: KBo 4.10 Ro 28-32.

[46] See Dinçol *et al.* 2000; 2001; Freu 2005, 400; Gurney 1997, 138; Melchert 2007.

[47] Dinçol *et al.* 2000, 14, 19.

[48] Melchert 2007, 511.

Further: 'Si un tel rapprochement toponymique [between Šaranduwa and Selinonte] est linguistiquement recevable – mais nous restons dans l'hypothétique (j'insiste là-dessus) –, cela signifie d'une part que le Tarḫuntašša n'englobait pas la Cilicie Trachée, tout au moins sa côte, et d'autre part que le territoire d'Ura pouvait s'étendre jusqu'à Sélinonte, comme s'était le cas vers le milieu du VIe siècle av. J.-C. (chronique de Nériglissar) et encore à l'époque romaine impériale comme l'a récemment parfaitement montré Alexis Porcher (…).[52] Le territoire d'Ura correspondrait ainsi à la classique K(i)ètide (…)' (**Figure 9**).[53]

In such a hypothetical territory of Ura, the main axis of communication would have been the Göksu valley, hence the importance of Kilise Tepe. I agreed with Olivier Casabonne about the role played by the Göksu valley as an interface between Cyprus and Rough Cilicia, and as a way of penetration and exchange with the heart of the Hittite Empire, perfectly illustrated by the distribution of the Red Lustrous Wheel-made Ware.[54] Two main origins – Cypriot and Rough Cilician – are in competition for the production of the Red Lustrous Wheel-made ware,[55] that Casabonne interpreted as follows. In case of a Cypriot origin, Ura would have been firmly controlled for the routing of the ware towards Ḫattuša and other Hittite centres.[56] In case of a Rough Cilician origin, 'par le biais de ses marchands d'Ura, le roi hittite contrôle une industrie céramique et donc les relations commerciales dans la région, tout en conservant ou respectant les diversités locales tant les situations observées en Cilicie Plane (Kizzuwatna) et en Cilicie Trachée (Ura) sont bien distinctes voir opposées'.[57] I would add with the exception of Mersin area.

Finally, it seems necessary to add that when the kingdom of Tarḫuntašša was founded in the 13th century BC, on the one hand, the city of Ura had been subject to the Hittite rule since at least Arnuwanda I, who reigned around the beginning of the 14th century BC;[58] on the other hand, Red Lustrous Wheel-made Ware was present at Kilise Tepe since the 15th century BC (Level IIIc onwards), and Cilician Red Painted pottery was produced since at least the 14th century BC. Thus, Kilise Tepe and Rough Cilicia would have been linked to Ura early on.

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[49] Casabonne 2005, 72 and footnote 11.

[50] 'Šaranduwa > *Salandû > grec Selinous, gén. –ontos > turc Selinti (maintenant Gazipasa) (> néo-babylonien Sallunê, après amenuisement de la dentale finale)' (Casabonne 2005, 72 and footnote 11).

[51] Casabonne 2005, 70.

[52] See Porcher in Casabonne and Porcher 2003, 135–138.

[53] Casabonne 2005, 72. As an echo to move up Tarḫuntašša's border further east and north, Jasink stated that 'the two states of Kizzuwatna and Tarḫuntašša as two distinct political entities have never had any contact (…) Tarḫuntašša, with an extension limited broadly speaking to the land of the Hulaya river, became a buffer state of considerable strategic importance in defense of the south-western belts of Anatolia' (Jasink 2001, 55).

[54] Casabonne 2005, 73.

[55] Knappett and Kilikoglou 2007; Kozal 2003; 2007; 2015; Kozal in Bouthillier *et al.* 2014, 145–147.

[56] Casabonne 2005, 73–74.

[57] Casabonne 2005, 74.

[58] Ünal 2018, 23. Ura has been documented for a longer time (Del Monte and Tischler 1978, 457–458).

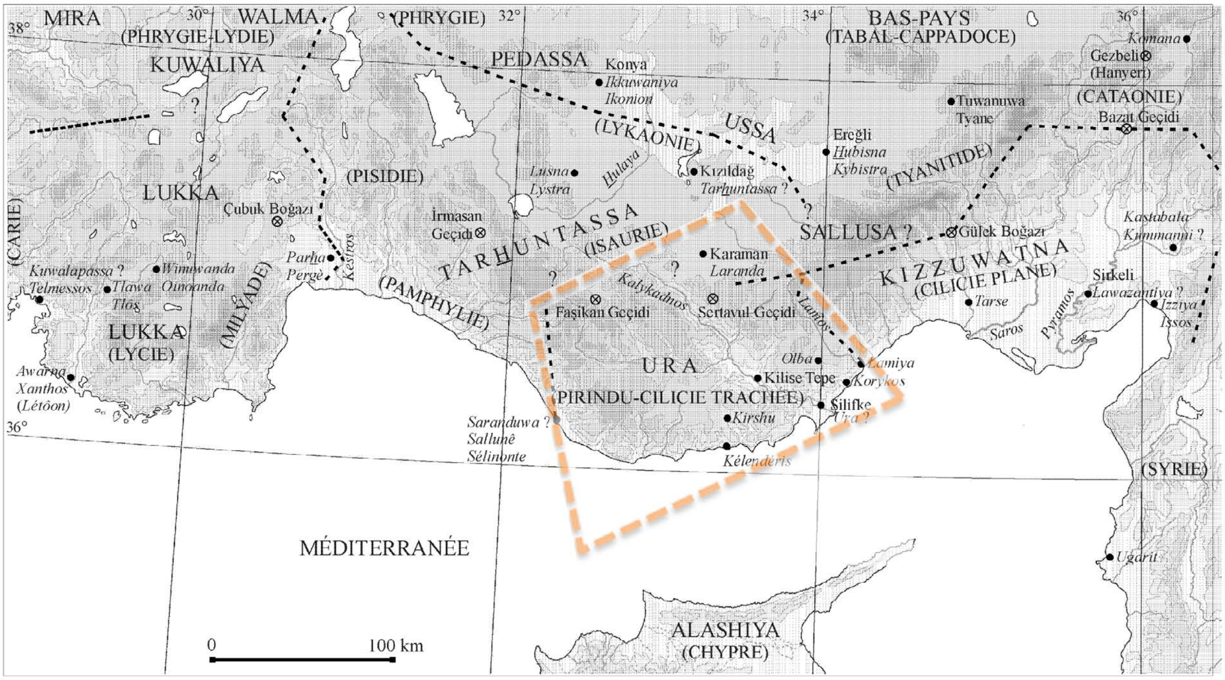
MIRA
WALMA
(PHRYGIE-LYDIE)
(PHRYGIE)
KUWALIYA
PEDASSA
Konya
Ikkuwaniya
Ikonion
BAS-PAYS
(TABAL-CAPPADOCE)
Komana
Gezbeli
(Hanyeri)
(CATAONIE)
Bazat Geçidi
Tuwanuwa
Tyane
USSA
(LYKAONIE)
Ereğli
Hubisna
Kybistra
(TYANITIDE)
LUKKA
(PISIDIE)
Lusna
Lystra
Hulaya
Kızıldağ
Tarhuntassa ?
Çubuk Boğazı
İrmasan Geçidi
TARHUNTASSA
(ISAURIE)
SALLUSA ?
Gülek Boğazı
Kastabala
Kummanni ?
(CARIE)
Kuwalapassa ?
Telmessos
Wiyanwanda
Tlawa
Tlôs
Oinoanda
(MILYADE)
Parha
Pergè
Kestros
(PAMPHYLIE)
Karaman
Laranda
Kalykadnos
KIZZUWATNA
(CILICIE PLANE)
Sirkeli
Lawazantiya ?
Izziya
Issos
Fașikan Geçidi
Sertavul Geçidi
Lamos
Tarse
Saros
Pyramos
LUKKA
(LYCIE)
URA
Olba
Kilise Tepe
Lamiya
Korykos
Awarna
Xanthos
(Létôon)
PIRINDU-CILICIE TRACHÉE
Silifke
Ura ?
Kirshu
Saranduwa ?
Sallunê
Sélinonte
Kélenderis
(SYRIE)
MÉDITERRANÉE
Ugarit
ALASHIYA
(CHYPRE)
0
100 km
38°
30°
32°
34°
36°

Figure 9: *Map with the hypothetical territory of Ura (after Casabonne 2005, 81).*

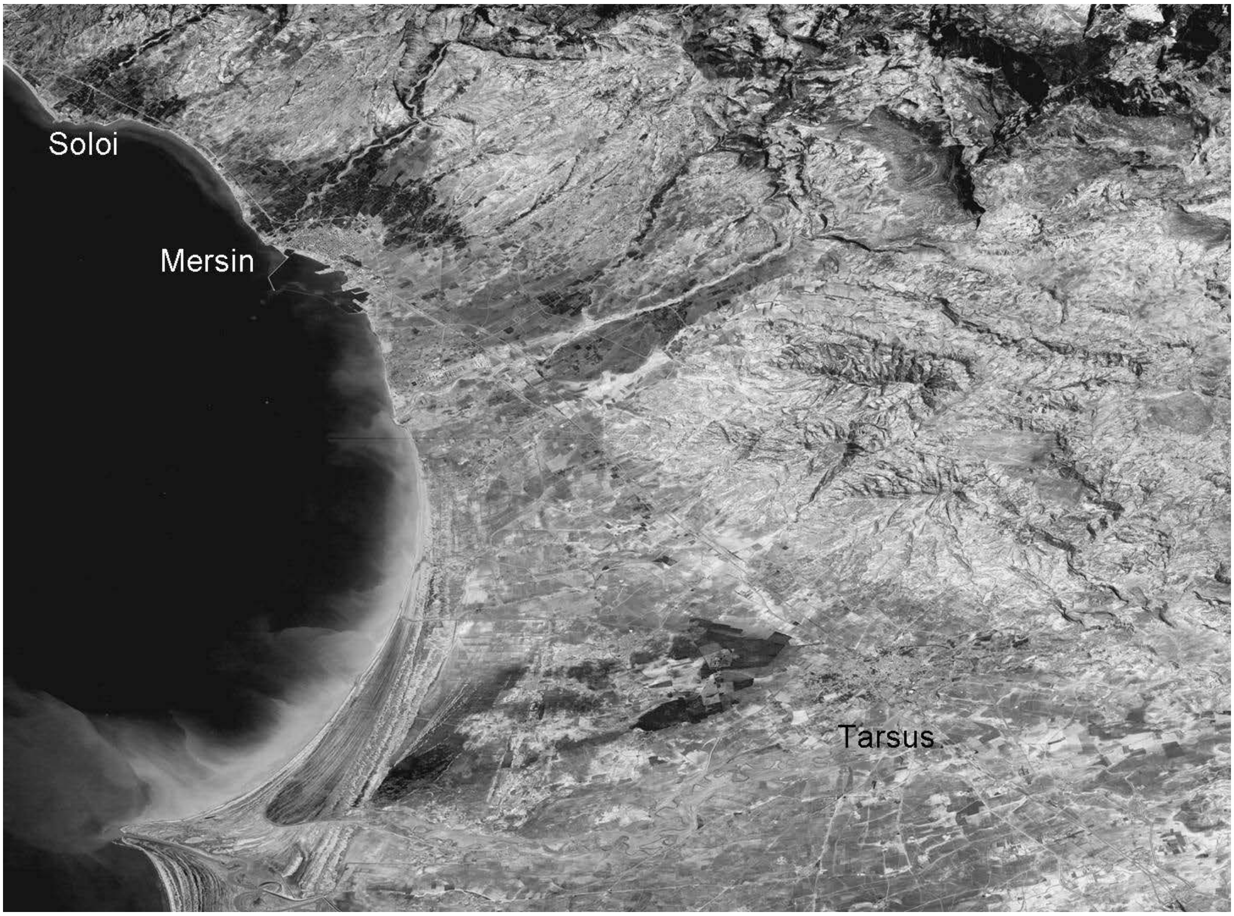
Soloi
Mersin
Tarsus

Figure 10: *Satellite photo of the coastline between Mersin and Tarsus (Graphic: Mersin-Yumuktepe Project).*

Conclusion

The distribution and an origin in Rough Cilicia of the Cilician Red Painted pottery, best represented by the cross-hatched painted square-rimmed jars, fits perfectly Casabonne's hypothesis. Seen from this angle, Yumuktepe was situated at the interface between Kizzuwatna, to which it geo-politically belonged, and the Ura territory, through probable economic links. Furthermore, from a geomorphological perspective and compared to today, Mersin area could have looked more tied to Rough Cilicia and appear more isolated from the rest of Plain Cilicia in the 2nd millennium BC, as the coastline was more inland between Mersin and Tarsus (**Figure 10**),[59] a zone somewhat difficult to access by land because of the marshes and the insalubrity. The geo-cultural characteristics of Yumuktepe and Soli Höyük, in other words Mersin area, define a micro-region. Its relative autonomy during the Late Bronze Age II is probably due to its close relations with Ura, whose port city and likely territory were of prime importance to the Hittites.

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[59] See Caneva and Marcolongo 2004 (especially Fig. 2) and Öner *et al.* 2005 (especially Fig. 3).

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Style as Representation of Political Hegemony? A View from the Edge of the Hittite Kingdom

Elif Ünlü

Abstract

This article investigates the question of style on a particular material culture and if one can gain perspective into a region's changing contingencies by exploring a *longue durée* assessment of shifts in pottery production traditions and consumption trends. The focus of this article is the north-east corner of the Mediterranean; namely the plains of Cilicia and Amuq. During Late Bronze Age the so-called 'Hittite' pottery known from the urban centres of Central Anatolia dominates the local pottery repertoire of these regions as they fold into the Hittite political control. This pottery is easily distinguishable by its shape repertoire and by the fact that it has minimum surface treatment. This is in stark contrast to the earlier Middle Bronze Age pottery tradition in the region, where painted decoration was used quite frequently, especially on serving vessels. This continues until the disintegration of the Hittite political territory, a period well attested in both settlements of Tarsus-Gözlükule in Cilicia and Tell Tayinat in the Amuq. This time with the appearance of the Aegean type pottery painted decoration becomes once again an important part of the assemblage representing a drastically different understanding of proper tableware both in form and surface treatment, which coexists with the plain central Anatolian style pottery indicating a complex process of acculturation and imitation.

Keywords

Ceramics, Cilicia, Tarsus-Gözlükule, painted decoration, Hittite

Özet

Bu makalede seramik üzerinde görülen biçemin ve uğradığı değişikliklerin bir bölgenin politik ve kültürel koşullarını yansıtıp yansıtmadığı konusu longue durée çerçevesinde irdelenmektedir. Bu amaçla Çukurova ve Amik ovalarına odaklanılmaktadır. Geç Tunç Çağı'nda Orta Anadolu kentsel merkezlerinde 'Hitit' seramiği olarak bilinen seramiğin, adı geçen bölgelerin Hitit politik kontrolü altına girmesiyle yerel seramik geleneklerinin yerini aldığını görürüz. Bu seramik grubu sadece formları üzerinden değil, ayrıca yüzeylerinin asgari şekilde işlem görmüş olmasıyla da kolaylıkla tanınır. Orta Anadolu geleneğindeki seramikler, Çukurova ve Amik ovalarındaki yerleşimlerde bir önceki Orta Tunç Dönemi'nde görülen boyalı sofra çanak çömlekleriyle karşılaştırıldığında, tam bir tezat oluşturur. Bu görüngü Çukurova'da bulunan Tarsus-Gözlükule ile Amik Ovasın'da bulunan Tell Tayinat yerleşimlerinden bilindiği üzere Hitit politik bütünlüğü çözülmeye başlayıncaya kadar devam eder. Bu dönemde ortaya çıkan Ege tarzı seramikler ile boyalı seramikler tekrar bu bölgede önem kazanır ve Orta Anadolu seramikleriyle bir arada var olmaları da Geç Tunç Çağı'nın sonunda değişen politik ve ekonomik koşulların karmaşık kültürel etkileşimlere yol açtığını düşündürür.

Anahtar Kelimeler

Seramik, Çukurova, Tarsus-Gözlükule, boya bezeme, Hitit

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 147–162

Introduction

The formation and establishment of a centralized Hittite kingdom in Central Anatolia in the course of the 2nd millennium BC changes the fragmented political landscape from city-states to a political unity that would last for several centuries.[1] This political formation had a significant cultural impact not only on the core area, but also on its neighbouring regions that folded under the Hittite hegemonic expansion soon thereafter, especially Southern Anatolia and Syria. One such manifestation of changes in the material culture is pottery, where in the annexed regions close to the Hittite core long existing local pottery traditions are quickly replaced by Central Anatolian ones. But what is even more remarkable is the fact that it is not only the surface treatment, but also the main shape repertoire that changes in the regions outside the Hittite heartland indicating changes in cooking methods and culinary traditions. This trend could be the result of the local populations adopting their tastes to conform to the culinary and display preferences of a politically dominant partner. However, these changes to the pottery repertoire are so pervasive and sudden one can also talk about Hittite state imposing a centralized pottery production industry on settlements under their political control. This phenomenon has prompted much debate and is seen as the depth of administrative (and by implication political) control of the Hittite central authority especially when factoring in the use of standardized potters' marks in these regions.[2] But one needs to keep in mind that there are other possible mechanisms for such standardization of a class of material as demonstrated for the Roman pottery along the empire's northern borderlands.[3]

So when Central Anatolian style pottery is regarded in settlements outside of the Hittite political heartland, the discussion veers towards the issue of style representing something deeper than tastes and fashion. One striking stylistic aspect of Hittite pottery tradition is that it is plain with minimal surface treatment. This mass produced, non-individualized, utilitarian pottery stands in an even starker contrast when the preceding local pottery repertoire displays a high preference for paint decorated adornment. In such a case painted pottery can be regarded as a marker of otherness and its coexistence a survival of the local tastes and demands. Therefore, the regions of Cilicia and the Amuq provide a good case study because they have a very well established and sophisticated painted pottery tradition during the Middle Bronze Age. This article focuses on the settlement of Tarsus-Gözlükule on the western part of the large alluvial Cilician plain. In addition, comparisons with the mound of Tell Tayinat located on the fertile Amuq plain will be provided (**Figure 1**).

The mound of Tarsus-Gözlükule is 300 x 150 m and rises 20 m above the plain. Earlier excavations headed by Hetty Goldman confirmed the Neolithic period settlement was founded 12 m below current plain level providing a 32 m total deposition of continuing settlement from its highest point.[4] The mound is currently excavated by Boğaziçi University under the directorship of Aslı Özyar. The new trenches are situated next to one of the main trenches (section A) of the former American excavations with the aim of tying to the established stratigraphy (**Figure 2, Table 1**).[5] Tell Tayinat was initially excavated by the University of Chicago's Oriental Institute. Currently the excavations on the mound are re-initiated by University of Toronto under the directorship of Timothy Harrison. Here only the later part of Late Bronze II/Iron I layers are present although nearby site of Tell Atchana gives a good stratigraphic deposition for the Middle and Late Bronze Age periods at the end of which the settlement shifts to Tell Tayinat.[6]

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[1] Barjamovic 2008, 88; Schachner 2017.

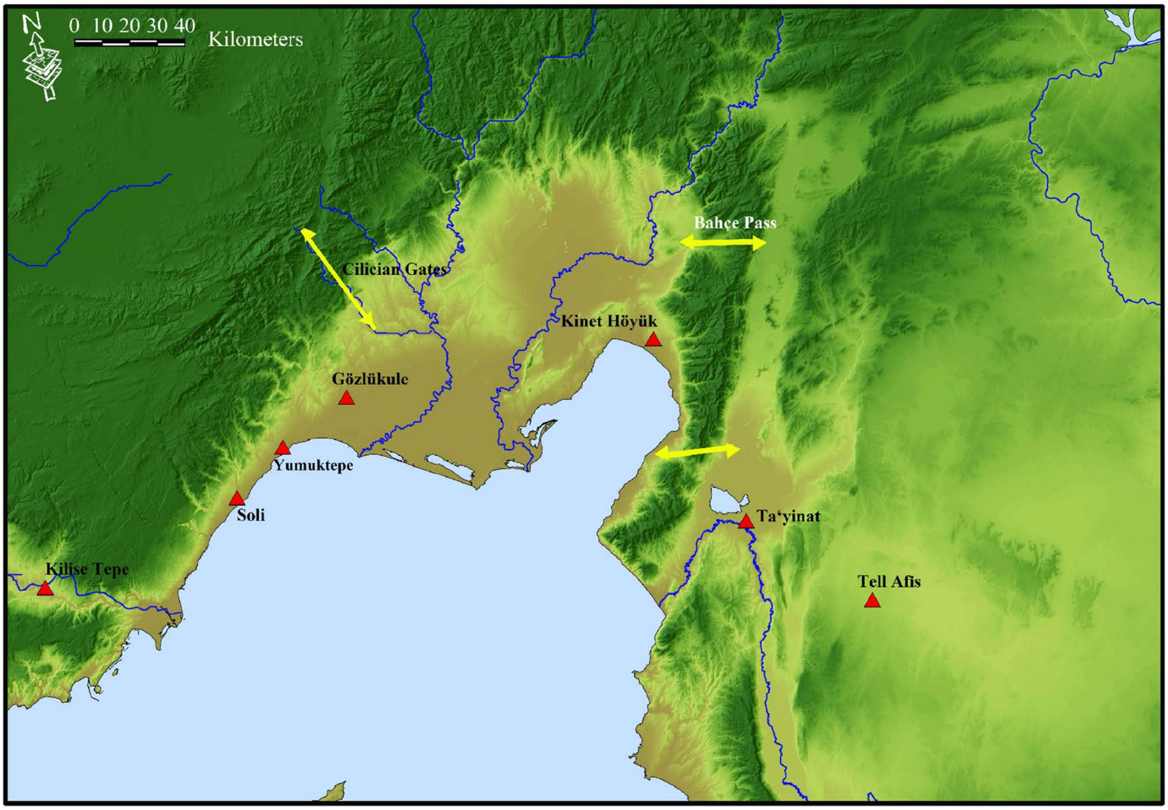
[2] Gates 2001; Mielke 2016, 172–175. Contra Glatz 2012 and Horowitz this volume.

[3] Such as production choices of the potters, movement of people, especially soldiers, by the authorities, behavior of subelites outside of the core are some of the factors discussed. See Poblome and Zelle 2002, 276–281; Broekaert 2016.

[4] Goldman 1956, 5, plan 26.

[5] Goldman 1956, plan 25.

[6] Woolley 1955; Haines 1971, 66; Harrison 2009a, 177; 2010, 84, 91; Ünlü 2016a; 2017.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0 10 20 30 40
Kilometers
Bahçe Pass
Cilician Gates
Kinet Höyük
Gözlükule
Yumuktepe
Soli
Ta'yinat
Kilise Tepe
Tell Afis

Figure 1: *Map of the region (Dr. Stephen D. Batiuk).*

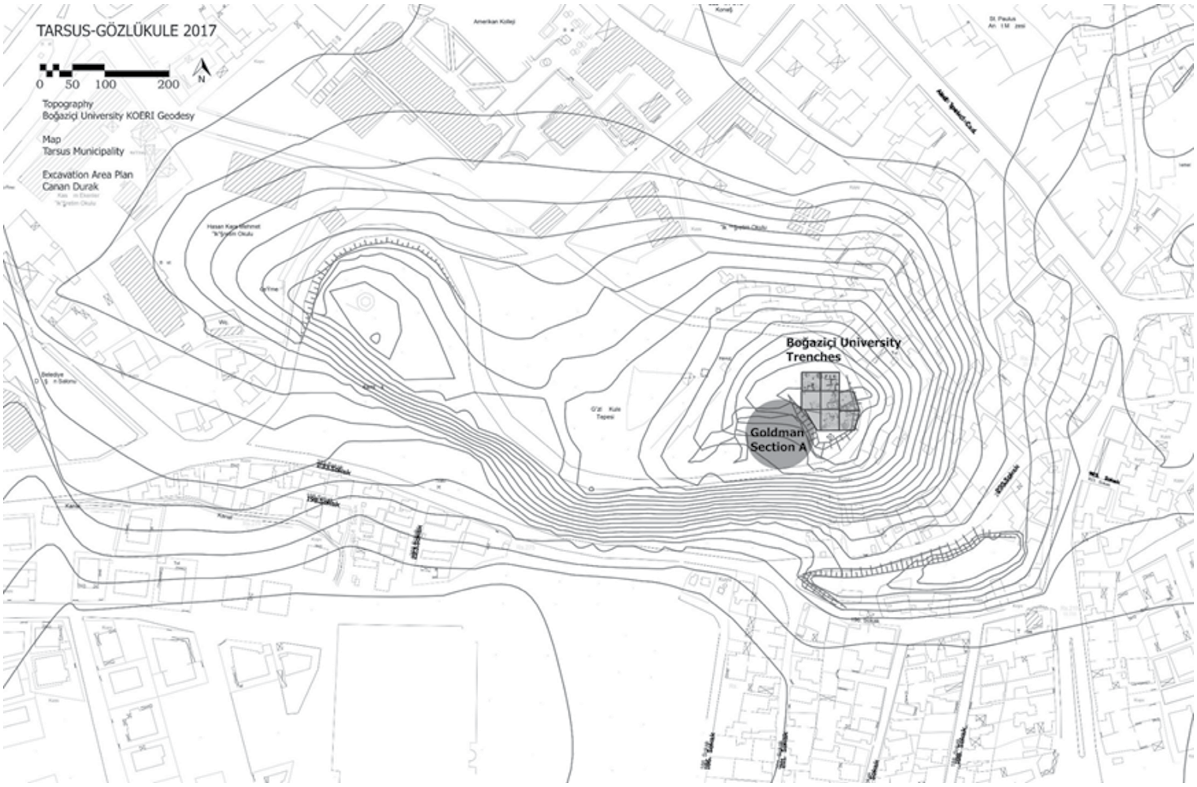
TARSUS-GÖZLÜKULE 2017
0 50 100 200
N
Topography
Boğaziçi University KOERI Geodesy
Map
Tarsus Municipality
Excavation Area Plan
Canan Durak
Boğaziçi University Trenches
Goldman Section A

Figure 2: *Topographical plan of the mound of Tarsus-Gözlükule with Goldman section A and Boğaziçi University trenches indicated (© TGK archive).*

Dates BC	Tarsus-Gözlukule Periods
2000–1800	**MB I** (Slane A.I-A.III)
1800–1640	**MB II** (Goldman LB I / Slane A.IV)
1640–1595	
1595–1400	**LB I** (Slane A.V-A.VI)
1400–1190	**LB IIa** (Slane A.VII/VIII)
1190–1130	**LB IIb** (Slane A.IX/B.IX)

Table 1: *Chronology of Tarsus-Gözlükule Middle to Late Bronze Age periods (adopted from the Cilician Chronology Group 2017, 182–183; dates according to middle chronology of Manning et al. 2016).*

The pottery

It is most informative when the painted pottery tradition at Tarsus-Gözlükule is evaluated in a diachronic assessment starting from Middle Bronze Age and spanning into Late Bronze IIb.[7] During Middle Bronze Age the northeastern corner of the Mediterranean forms a *koiné* of a distinctive painted wheel-made pottery tradition, called the Syro-Cilician Painted Pottery. The island of Cyprus represents another elaborately painted pottery tradition during Middle Bronze Age. Considering that this ware is mostly found on the northern and northeastern regions of the island[8] it is not surprising to see many shared decorative elements between the Syro-Cilician Painted Pottery and Cypriot White Painted II Ware.[9] The decorative motives are mostly geometric, but some figurative decoration is also present. In some cases, the whole vessel is zoomorphised by combining a particular shape with a specific painted decoration, like the eye-pitchers that transform the whole vessel into a figurative representation of a bird (**Figure 3.1**). Typically, pitchers and bowls are paint decorated indicating that this is specifically applied to serving vessels intended for display. This is in contrast to Central Anatolia where mainly a monochrome surface treatment is preferred where the surfaces of serving vessels are at most burnished with some instances of applied plastic or incised decoration.

At Tarsus-Gözlükule Syro-Cilician Painted Pottery is well represented and is a local production. In fact, it is considered a marker for the onset of Middle Bronze Age period on the site.[10] The Middle Bronze I period represents the high point of this ware where the decoration is more carefully applied accentuating the zones of the vessels (**Figure 3**).[11]

During the Middle Bronze II period painted decoration is more simplified. Bichrome decoration becomes an essential part of the assemblage (**Figure 4**).[12] There is some hybridized examples displaying

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[7] In a new reassessment of Tarsus-Gözlükule chronology the Late Bronze I period is re-dated as Middle Bronze II, based on material correlations from Kinet Höyük and also from PhD dissertation of D. Slane (1987) and a MA theses done on Middle Bronze (Güldüren 2013) and Late Bronze I levels at Boğaziçi University. In this new scheme Late Bronze Age I would only fall within Slane levels VII–VIII (see **Table 1**).

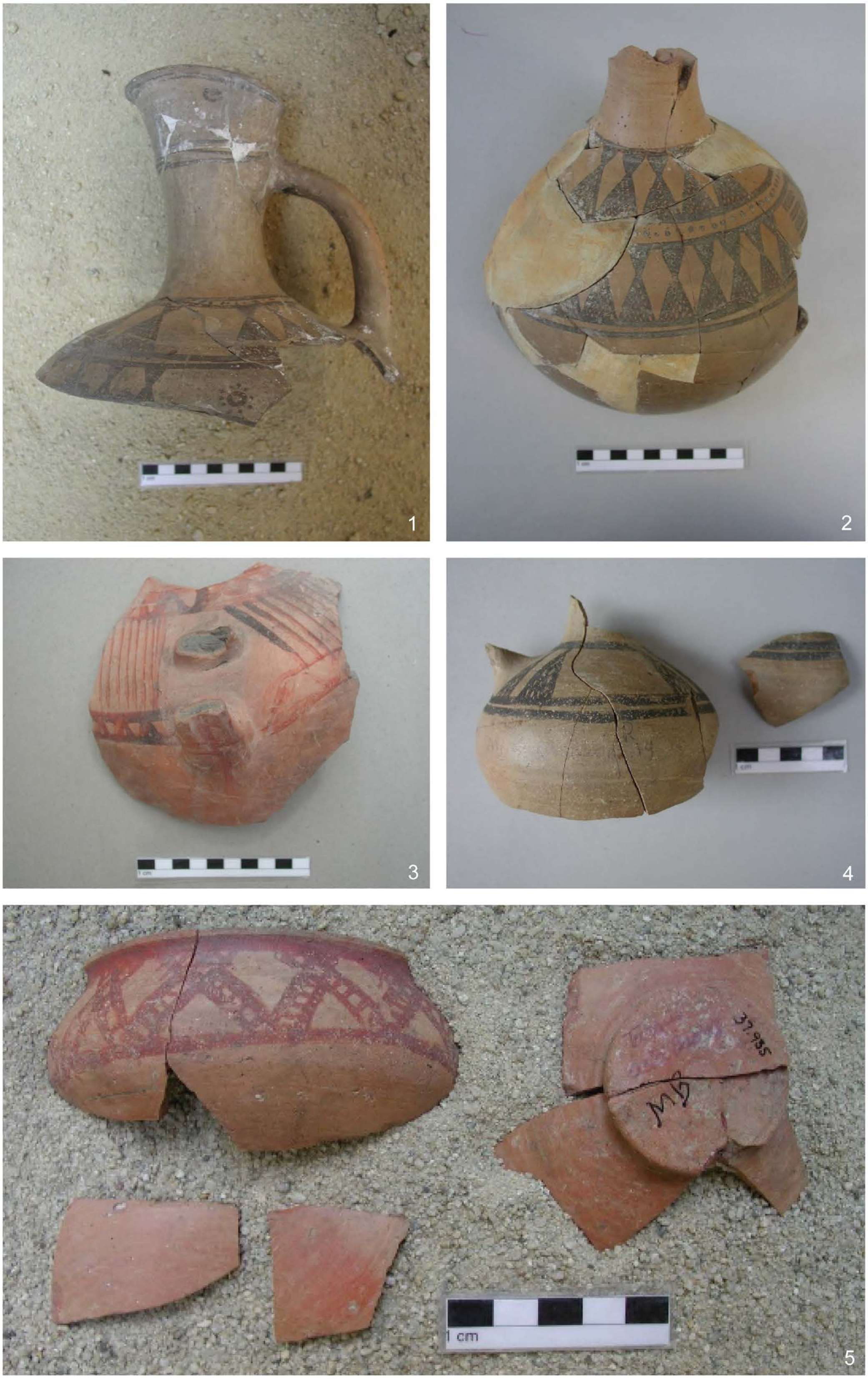
[8] Gagne 2012, 272–273.

[9] Active relations between the island and Cilicia continue as attested in pottery: Goldman 1956, 182.

[10] Goldman 1956, 164.

[11] Stratigraphically more fine-tuned assessment was possible by using the diaries of the Goldman excavations treated in an unpublished MA thesis by A. Güldüren (2013).

[12] Bichrome decoration might even have started during Middle Bronze Age I, but this is difficult to confirm definitively given the difficulty of identifying exact contexts of the material all excavated several decades ago.


1 cm
1
2
3
4
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MB
1 cm
5

Figure 3: *Middle Bronze I painted pottery from Tarsus-Gözlükule Goldman Excavations (© TGK archive Goldman excavation material).*

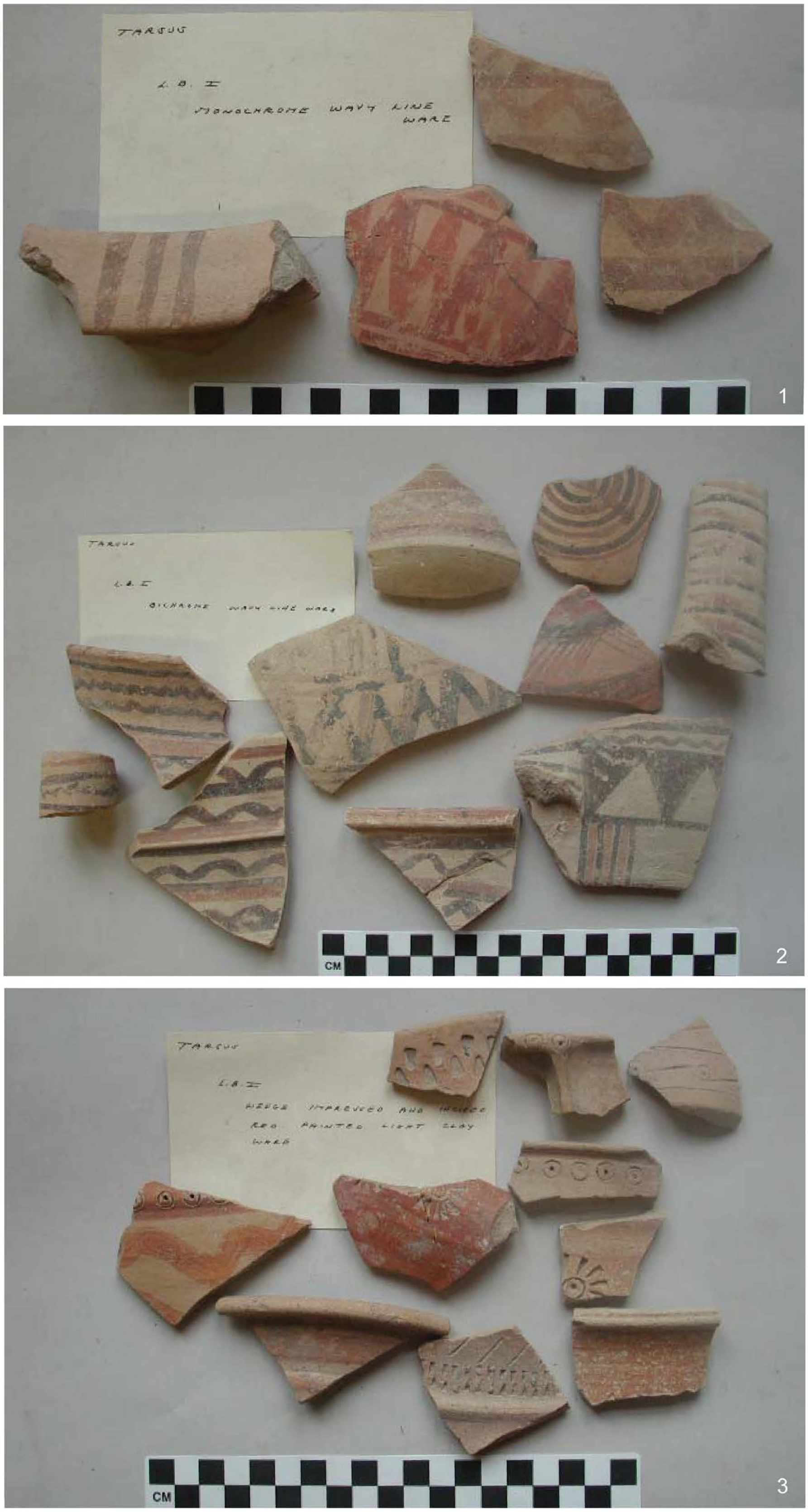
TARSUS
L.B. I
MONOCHROME WAVY LINE WARE
1
TARSUS
L.B. I
BICHROME WAVY LINE WARE
CM
2
TARSUS
L.B. I
WEDGE IMPRESSED AND INCISED RED PAINTED LIGHT CLAY WARE
CM
3

Figure 4: *Middle Bronze II painted pottery from Tarsus-Gözlükule Goldman excavations with clearer stratigraphic associations (© TGK archive Bryn Mawr College study collection – Goldman excavation material).*

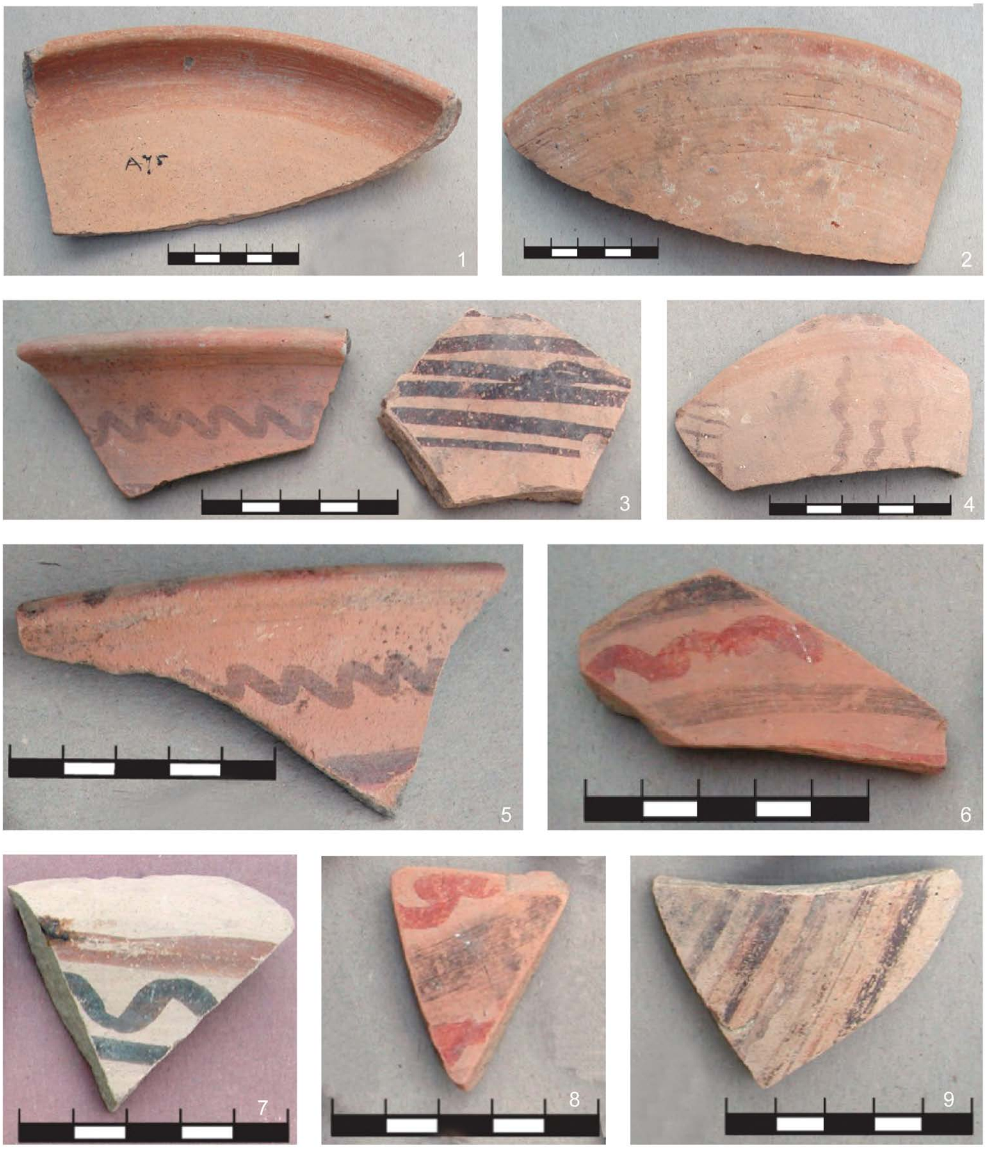

Figure 5: *Late Bronze I painted pottery from Tarsus-Gözlükule Goldman excavations with clearer stratigraphic associations (© TGK archive Goldman excavation material).*

Central Anatolian type shapes that are paint decorated.[13] New in this level is the so-called Stamp Decorated Ware where some pieces are also paint decorated (**Figure 4.3**).[14] This is most probably a Syro-Anatolian/Mitanni tradition. Stratigraphically this ware occurs earlier than the Black Impressed Ware, both at Tarsus-Gözlükule and other sites in Syro-Anatolia.[15]

In the ensuing Late Bronze Age I level the decoration becomes even more simplified consisting mostly of combinations of straight and/or wavy lines (**Figure 5**). Bowls painted with a wide band around rim are frequent (**Figure 5.1–2**).[16] Bichrome decoration continues (**Figure 5.3–9**).

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[13] Goldman 1956, 183, Fig. 309, nr. 1009.

[14] Goldman 1956, 201–202.

[15] For example, at Tell Atchana/Alalakh: Woolley 1955, Pl. CI mostly in level V; at Hirbemerdon Tepe dated to Phase IIIB (Middle Bronze Age): Laneri *et al.* 2016, 60, 64–67, Pl. LXIII, nos. 456, 460. Here especially in cultic contexts, see very elaborate plaques: Pls. CLXIV-CLXX.

[16] Goldman 1956, 184.

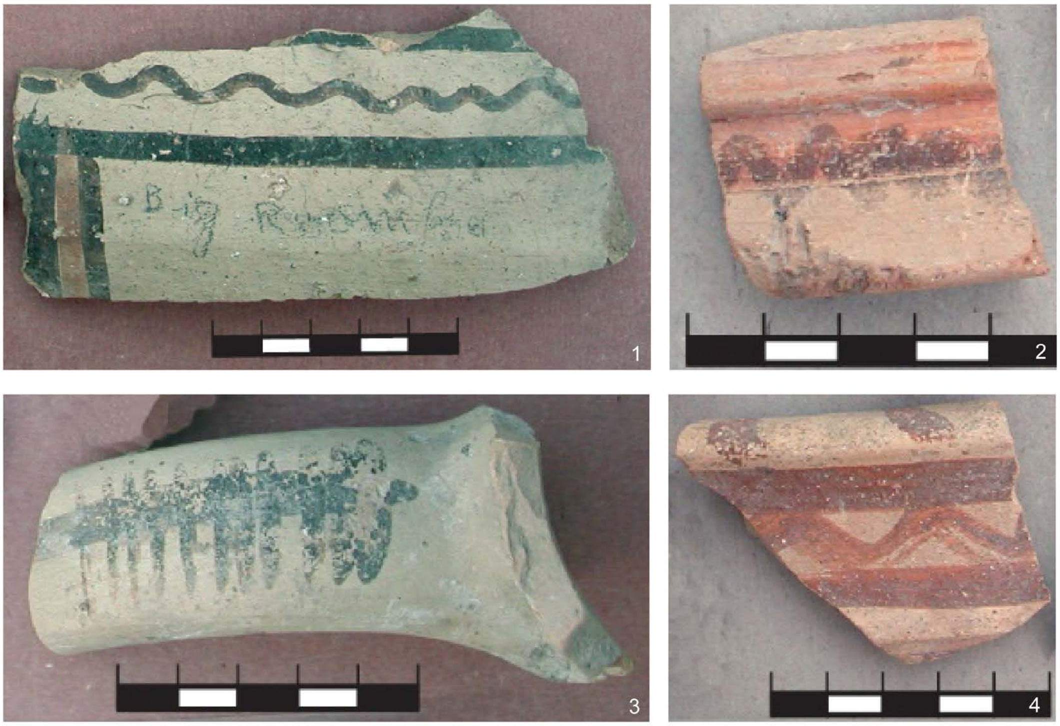

Figure 6: *Late Bronze IIa painted pottery from Tarsus-Gözlükule Goldman excavations with clearer stratigraphic associations (© TGK archive Goldman excavation material).*

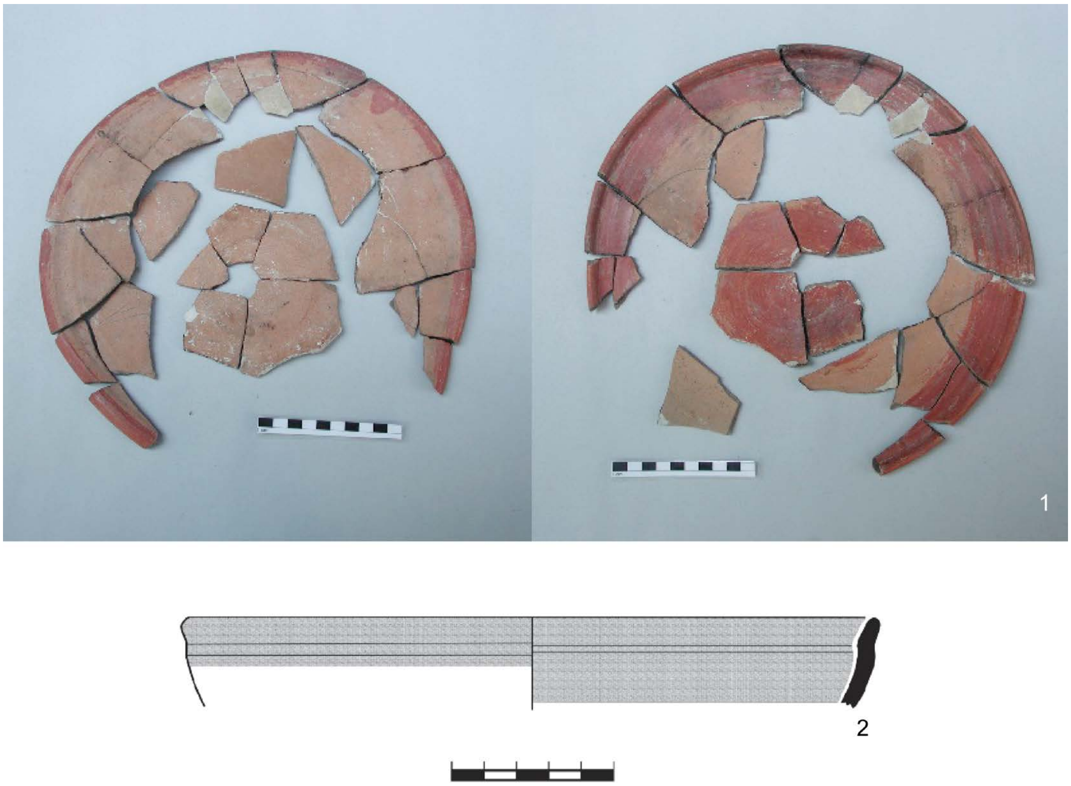

Figure 7: *Late Bronze IIa painted pottery from Tarsus-Gözlükule Goldman excavations (1) and Late Bronze IIb painted pottery from Tarsus-Gözlükule Boğaziçi excavations (2) (from trench B797, pit 162) (© TGK archive Goldman and Boğaziçi excavation material, drawing Elif Ünlü).*

During Late Bronze II central Anatolian type pottery with minimal surface treatment and decoration takes over most of the assemblage. But at Tarsus-Gözlükule paint decorated pottery is still found in these levels albeit in much smaller numbers. Like the previous period the decoration is very simple, consisting of parallel and wavy lines (**Figure 6.3–4**). Bichrome is still present (**Figure 6.1–2**). Bowls with band decorated rims continue (**Figure 7.1**). These share similar profiles with undecorated bowls considered to be part of the typical Central Anatolian shape repertoire. There too partial slip is used on vessels as a decorative element, which is seen as a continuation of a Middle Bronze Age tradition as well, becoming infrequent over time.[17]

During Late Bronze II the inhabitants of Tarsus-Gözlükule maintained their earlier traditional networks (both with Cyprus and Syria) in addition to its recent dominant interaction sphere with Central Anatolia.[18] This can be expected since Cilicia was one of the main access routes to the Mediterranean for the Hittite Kingdom[19] and may be one of the reasons for the seemingly sudden shift in interaction sphere towards the Mediterranean (especially Cyprus) after the collapse of the Central Anatolian political control in Cilicia in the later part of Late Bronze II (Late Bronze IIb at Tarsus-Gözlükule).[20] At Tarsus-Gözlükule we can trace the transition from Late Bronze IIa to IIb best in Section B of the former Goldman excavations. Here, after a major conflagration destroyed the well-built area, it is immediately rebuilt with architecture showing similar orientation indicating that a short time span has passed between the two building levels, but not as well executed.[21] This is in contrast to Section A where the official Hittite building was completely destroyed and never rebuilt. In its stead buildings with a more domestic character are made in the mud-brick debris of the destruction.[22] Clearly what it embodied was now defunct.

Diaries from Goldman excavations indicate that in Section B after the destruction there are two building phases, one is the earlier Late Bronze IIb levels with strong continuation of the Central Anatolian pottery tradition and the latter is the so-called 'Phantom Unit'[23] where this pottery still continues, but now there is a high concentration of LH IIIC pottery in the assemblage.[24] The stratigraphy of Late Bronze IIb levels in Section A are less clearly understood by the Goldman excavations due deep war trenches dug into this highest part of the mound, but there is immediate rebuilding in the area as well although very different in character.[25] The current Boğaziçi University excavations on the site have reached these levels in several of their trenches.[26] Here also a similar trend can be observed where LH IIIC and Central Anatolian Hittite style pottery occur together. These two traditions represent very distinct approaches to production technique in their clay composition, culinary style in their shape repertoire, and display attributes in their surface treatment indicating drastically different food consumption habits. In these levels bowls with decorated rims are also present indicating that a long-standing painted tradition still continues into the Late Bronze IIb period (**Figure 7.2**).

During this period but also continuing into the Early Iron Age, there is another painted pottery style, called Cilician Painted Ware, occurring at Tarsus-Gözlükule that stands in stark contrast to the undecorated Central Anatolian pottery tradition dominating the assemblage at the site for several

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[17] Schoop 2011, 260.

[18] Goldman 1956, 204–205, 216–220.

[19] Schachner 2012, 40.

[20] Mommsen *et al.* 2011; Mountjoy *et al.* 2018.

[21] Goldman 1956, 51, 58, plans 23–24.

[22] Goldman 1956, 50, plan 22; Özyar *et al.* 2012, 421–422, plan 5; 2014, 173–174, plan 3; 2016, 556, plan 3.

[23] Identified and coined by Dorothy Hannah Cox in her 1936 diary.

[24] Slane 1987, 84; Ünlü 2015.

[25] Goldman 1956, 50, plan 22.

[26] Özyar *et al.* 2012, 421–422, plan 5; 2014, 173–174, plan 3; 2016, 556, plan 3; Ünlü 2016b.

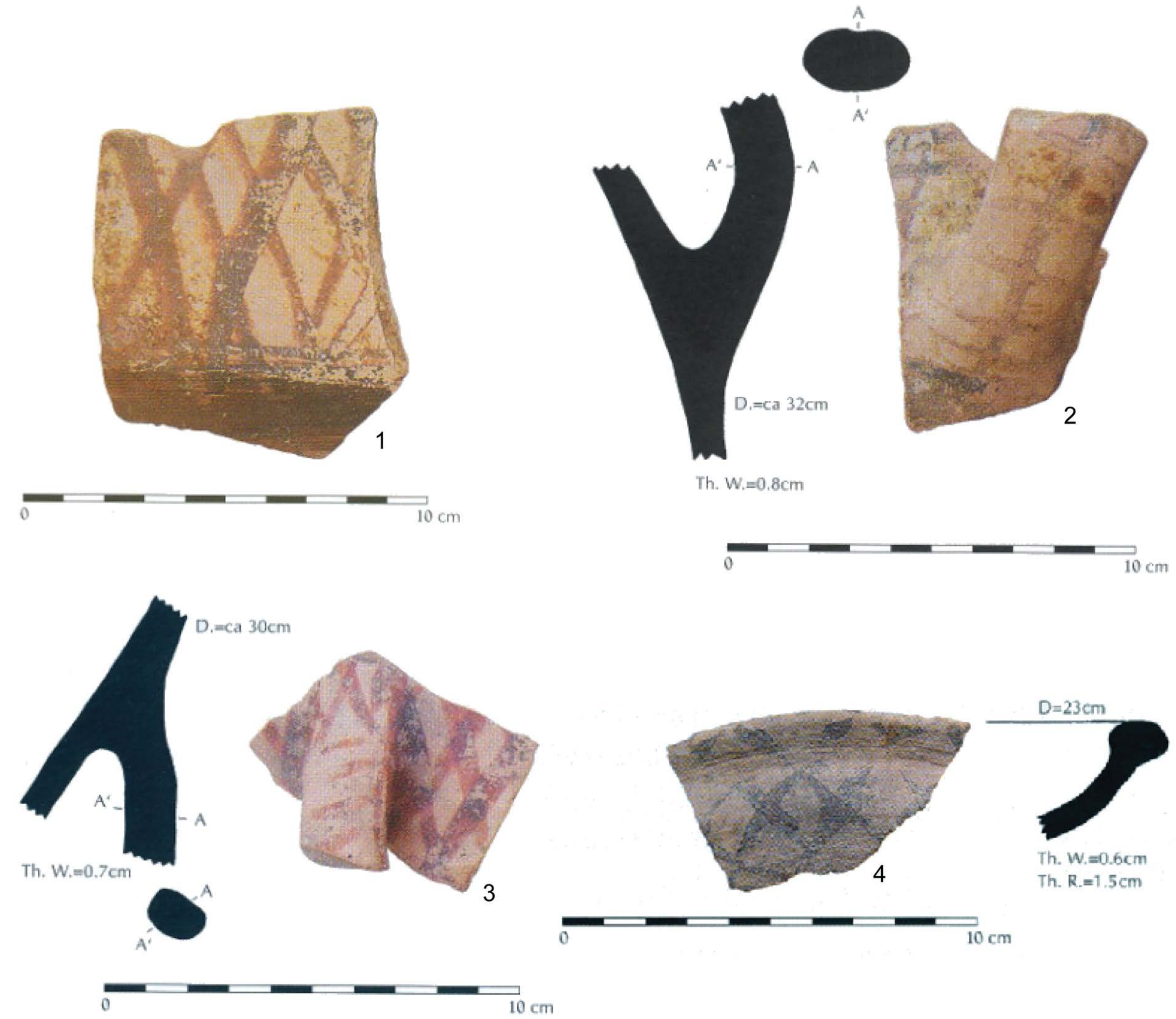

Figure 8: *Late Bronze II (1–2) and Early Iron Age (3–4) Cilician Painted Pottery from Tarsus-Gözlükule Goldman Excavations (© TGK archive Goldman excavation material).*

centuries (**Figure 8.1–2**). It seems to be of local production consisting of open vessels, like bowls, but also of closed vessels, like jars.[27] This type of pottery is reported from earlier levels in western regions of Cilicia, especially at Kilise Tepe and also at Soli.[28] Given this geographical and temporal distribution, one can propose that Cilician Painted Ware was more at home to the west of the Cilician plain from whence it spread further east after the collapse of the Central Anatolian political apparatus at sites like Tarsus-Gözlükule where it continues into Early Iron Age (**Figure 8.3–4**).[29]

Tarsus (Tarsa) being an important urban center of the land of Kizzuwatna was politically associated with the Hittite Kingdom early on.[30] The bulla from the stamp seal of Išputahšu, the king of Kizzuwatna, written in Luwian hieroglyphs and designed in the Central Anatolian style demonstrates very well the

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[27] Ünlü 2015, 504–505.

[28] Yağcı 2010; Bouthillier *et al.* 2014.

[29] Ünlü 2005; 2015, 506–507.

[30] Goldman 1956, 63; Kozal and Novak 2017 with further literature.

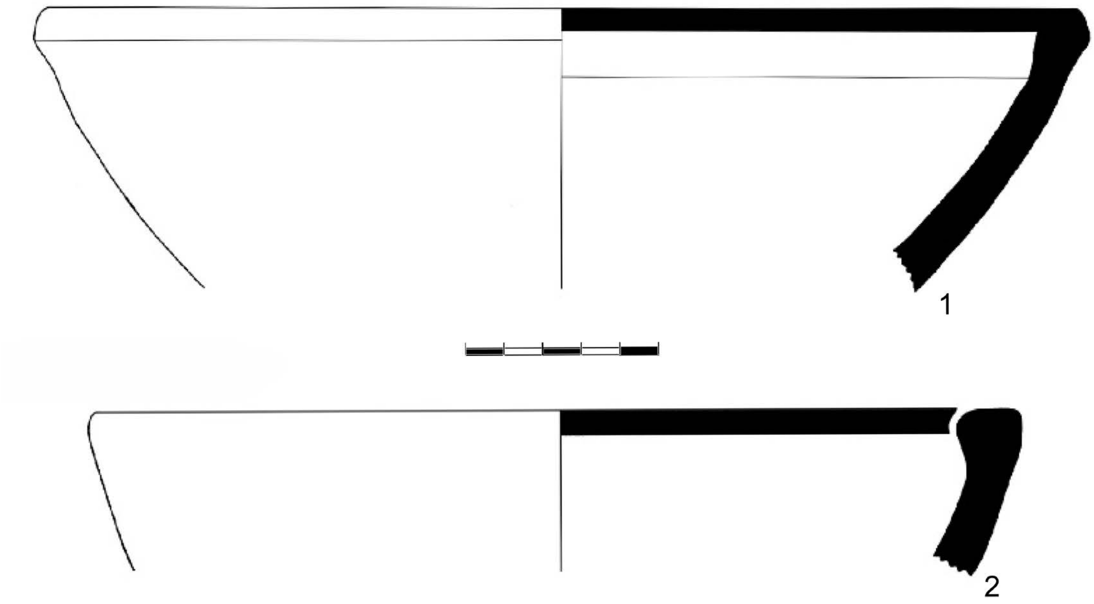

Figure 9: *Tell Tayinat Iron IA rim pottery from TAP Phase 6a (1) and 5b (2) (drawing Elif Ünlü).*

cultural influence of the Hittites on the political elites of the Cilician Kingdom.[31] However, Late Bronze I levels at Tarsus-Gözlükule (Slane levels VII–VIII) also show strong affinities with Middle Bronze II material culture, especially in pottery as is also demonstrated in this article.[32] During the Late Bronze II period after Kizzuwatna ceased to be a politically independent entity and folded into the Hittite realm firmly, it remained an important region for the Hittites culturally especially in the cultic sphere, as well as economically, connecting the land-bound Central Anatolian kingdom with the Mediterranean and hence allowing participation in the remarkable maritime trade with other affluent contemporaries.[33] The strong Hittite influence is reflected not only in pottery, but also in the style of the official building uncovered in Section A, as well as with the presence of numerous Hittite seals and sealings, Central Anatolian type weapons, and the rock crystal statuette. When that hegemonic power waned, the region forged stronger links with its earlier, and perhaps more organic networks via Mediterranean sea routes, which were never completely severed, meanwhile maintaining some of the Central Anatolian political and cultural aspects for a little while longer.[34] This all culminated into a multi-ethnic independent state of Hiyawa/Que, which was an active participant in a thriving maritime community connected with Cyprus and the Levant, as well as the Aegean amidst the growing power of Assyria to the east.[35]

The slightly different political trajectory of the Amuq during the 2nd millennium BC is somewhat reflected in the material culture with Syro-Cilician Painted Pottery not lasting beyond level VI and the region's stronger ties to the Mitanni to the east evidenced by the so-called Nuzi/Atchana Ware at the Late Bronze levels of Tell Atchana/Alalakh,[36] which was the capital of the land of Mukish when it was annexed by the Hittites.[37] This political shift manifests itself in the pottery repertoire as Central

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[31] Goldman 1956, 246–247.

[32] Slane 1987, 381–386 for examples. However, this is very limited exposure. The situation is different on the more easterly site of Kinet Höyük, where the ceramic assemblage changes completely to the Central Anatolian tradition in Late Bronze I, Gates 2006, 293.

[33] Novak 2010, 403–405 with literature.

[34] Hawkins 2009; Yalçın 2013.

[35] Goldman 1963, 154–160; Mommsen *et al.* 2011; Mountjoy *et al.* 2018.

[36] Woolley 1955 pls. CII-CVII; Kozal and Novak 2017, 305–307.

[37] Hawkins 2009, 165.

Anatolian style pottery becomes prevalent especially for level II.[38] After the collapse of the political domination of the Hittite Kingdom in the region we see strong ideological continuities in the ensuing state of Palistin/Walistin, the capital of which Hawkins proposes was at Tell Tayinat.[39] The pottery repertoire reflects this, where Central Anatolian type pottery production continues to be prevalent in the Iron IA levels. Another continuation and a link to Cilicia is in the rim decorated pottery with typical Central Anatolian shapes (**Figure 9**). But at the same time (and similarly as in Tarsus-Gözlükule) there is a considerable amount of pottery that is of LH IIIC tradition on the site.[40] Cilician Painted Ware is not encountered in this region at all. At Tell Tayinat the multifaceted pattern of strong continuities in the material culture accompanied by abrupt changes are a manifestation of the complex political reality of the later part of the 2nd millennium BC.

Conclusion

In conclusion for the northeast corner of the Mediterranean we can postulate that Central Anatolian ceramic traditions dominate the local pottery assemblage during the Hittite political hegemony over the region. This pottery class with its minimal surface treatment stands in complete contrast to the earlier Middle Bronze Age pottery assemblage, especially in tableware consisting of attractively painted pitchers and bowls. Therefore, one can propose that a shift in the political status of the region generated related changes in the material culture, pottery being one of them. Yet local traditions are not completely discontinued for some settlements like at Tarsus-Gözlükule, where even if in small numbers paint decorated pottery is consistently present in all Late Bronze Age levels. Paint decoration makes a comeback after the Hittite political influence over the region is lessened. The influx of Aegean style pottery in the region taps into networks where Cyprus plays a pivotal role.[41] On the other hand, crudely decorated Cilician Painted Ware ceramics may indicate other networks were also operational. Considering the possible importance of Göksu valley region for the production and distribution of the Red Lustrous Wheel-made Ware to the greater eastern Mediterranean,[42] the geographical expansion of Cilician Painted Ware during Late Bronze IIb period could perhaps be interpreted as survival of these exchange networks, albeit within a much-localized area. These then develop into the lively paint decorated pottery assemblage that starts with Early Iron Age in Cilicia and continues through the Iron Ages. The so-called Cypro-Cilician Painted Pottery develops into a *koiné* that encompasses Cilicia, Cyprus, and the Levant with Cyprus acting as an anchor in the dissipation of this style to the Levantine coastal settlements. This is a period of political independence for Cilicia amid the growing power of Assyria in the East. The kingdom of Hiyawa/Que with its royal house professing descent from the legendary Mopsos is an active player in the political landscape of the period and the elites inscribing several monuments in Hieroglyphic Luwian and Phoenician bilinguals attest to dynamic and multi-ethnic demographics of the region.[43] In the Amuq local paint decorated pottery was mainly discontinued during the Late Bronze Age.[44] In Iron IA (Late Bronze IIb in Cilicia) Aegean style pottery becomes part of the repertoire where this floruit is discontinued quickly as the site becomes the capital of a newly formed territorial state balancing networks with the Mediterranean as well as the growing power of Assyria to its east. Tell Tayinat never becomes part of the Cypro-Cilician painted pottery *koiné* as this ware is rare at this site and with growing Assyrian pressure the assemblage rather shifts to reflect that with red burnished surface treatment becoming ubiquitous.[45]

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[38] Kozal and Novak 2017, 308.

[39] Harrison 2009a; 2009b; 2010; Hawkins 2009, 169–171; Weeden 2013.

[40] Janeway 2011; Ünlü 2017.

[41] For the importance of Cyprus see Mountjoy 2010.

[42] Knappett and Kilikoglou 2007; Kozal 2015; Kibaroğlu *et al.* 2019.

[43] Hawkins 2009, 165–166; Yakubovich 2015; with addendum by Hawkins 2015.

[44] Although Woolley claims few sherd that exhibit older painted tradition found in levels III–II: Woolley 1955, 319 and Pl. XCVII.

[45] Osborne 2011.

Stylistic and decorative aspects of a class of material culture, because they do not require specialized knowledge and technological know-how and because they are easily detectable on the finished product, are more easily appropriated depending on the symbolic and aesthetic values they acquire based on economic and political circumstances.[46] On the other hand, perhaps because of this accessibility, style can also be regarded as a means of control for an incipient centralized political power.[47] Settlements form and share interaction and influence networks which shift and change over time, depending on each region's geographical position as well as political framework. These trajectories are reflected in the material culture, pottery being one facet of it. Here a *longue durée* assessment of a particular aspect of a material culture, in this case painted pottery, is attempted to gain perspective in a region's contingencies. This of course needs to be further evaluated within the totality of the material culture to form a more fine-tuned picture, albeit always incomplete.

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[46] Gosselain 2000, 191.

[47] Wengrow 2001.

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Red Band Decorated Pottery from Tepebağ Höyük/Adana

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Abstract

In the second half of the 2nd millennium BC, a new kind of plain ware ceramic with strong connections to the Hittite pottery of Central Anatolia appeared in Cilicia. During the excavations at Tepebağ Höyük, some fragments of typical Hittite vessel shapes with colored decoration were found; these represent less than one percent of the Late Bronze Age assemblage. This red stripes decoration is generally applied to the upper parts of the vessels, around their rims, and is limited to only a few forms. Monochrome ware without surface treatment – typical of Hittite pottery in Central Anatolia – has also been found. Although the Late Bronze Age red band decorated pottery from Tepebağ Höyük displays features of Hittite or North Central Anatolian tradition, it probably represents a local production. A direct impact of the Hittite tradition is seen at first glance, but an independent regional influence is more likely. The main argument for this view is the fact that the large shallow plates with thickened rim, on which the red bands are applied, are original Hittite shapes that occur in Central Anatolia exclusively as non-decorated plain ware. Another possible evidence is the chronological discrepancy between the appearance of band decorations in Central Anatolian and at Tepebağ, as well as the spread of this decoration in the Late Bronze Age contexts of other sites in the region. Therefore, examples of this pottery from Tepebağ Höyük can be seen as a syncretism of the Hittite and Cilician pottery traditions.

Keywords

Cilicia, Tepebağ/Adana, Late Bronze Age, Pottery, Red Band Decoration

Özet

MÖ 2. binyılın ikinci yarısında Kilikya'da, Orta Anadolu'nun Hitit seramikleriyle bağlantılı bir çanak çömlek ortaya çıkar. Tepebağ Höyük'deki kazılarda üzerinde boya bezemeleri olan tipik Hitit formlarına işaret eden parçalar ele geçirilmiştir. Kırmızı şerit bezeme genellikle basit kapların ağız kenarları boyunca üst kısımlara uygulanmış olup ve birkaç formla sınırlıdır. Tüm seramik koleksiyonunun yüzde birinden daha az bir kısmını oluştururlar. Hitit Dönemi'nde Orta Anadolu için tipik olan monokrom, yüzey işlemi yapılmamış mallara da Tepebağ Höyük'te rastlanır. Buradaki Geç Tunç Çağı seramiğinin özellikleri Kuzey Orta Anadolu veya Hitit etkisine işaret etmektedir ancak olasılıkla yerel üretimdir. Orijinal Hitit formlarından biri olan kalınlaştırılmış kenara sahip büyük yayvan tabakların Orta Anadolu'da tamamen bezemesiz olarak imal edilmesi bunun için bir gerekçedir. Diğer bir gerekçe ise boyalı seramiklerin ortaya çıkışı noktasında Orta Anadolu kronolojisindeki kabuller ile Tepebağ'ın da aralarında olduğu bölgenin yerleşimleri arasındaki tutarsızlıktır. Böylece bu seramik geleneği bir tarafta Hitit diğer tarafta ise Kilikya olmak üzere iki farklı geleneğin bir birlikteliği olarak görülebilir.

Anahtar Kelimeler

Kilikya, Tepebağ/Adana, Geç Tunç Cağı, seramik, kırmızı bant bezeme

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 163–176

Introduction

New excavations at Tepebağ Höyük in Adana's city center, have been conducted since 2013 and revealed a long sequence of settlement history. Although the excavations have hitherto been carried out only in limited areas, the results are nevertheless noteworthy. In general, the cultural development in Tepebağ Höyük is similar to that of other Cilician sites.[1] As is typical of the region, several different groups of pottery from different ceramic traditions – both painted and unpainted – are attested in the archaeological material. The tradition of painted pottery in Cilicia can be traced back to the Late Neolithic/Early Chalcolithic period. However, when the introduction of the potter's wheel during the Early Bronze Age turned this craft into a mass-production activity, painted pottery did not disappear. Indeed, this tradition continued alongside monochrome wares into the Late Bronze Age and the Iron Age. Especially in the 2nd millennium BC, diverse groups of painted pottery can be found throughout Cilicia.[2] However, during the second half of the 2nd millennium BC, a remarkable appearance of new plain pottery wares with strong connections to the Hittite ceramics of Central Anatolia is observable; this is usually considered as evidence of the Hittite hegemony over the region. Recent research has revealed the presence of typical Hittite pottery, not only at Tarsus and Mersin, but also at Tatarlı Höyük, Kinet Höyük, Sirkeli Höyük, and Tepebağ Höyük.[3]

The analysis of the archaeological material from the new excavations at Tepebağ Höyük also includes Late Bronze Age ceramics. Some fragments of typical Hittite vessel shapes, which show a striking and unusual kind of painted decoration, have been found at the site. This decoration, which features red single bands or stripes, is generally applied at the upper parts of the vessels, around their rims, and is limited to a few forms. The evaluation of this material demonstrates that a possible syncretism of two different pottery traditions, Hittite and Cilician, caused this phenomenon. Before presenting the red band decorated pottery from Tepebağ Höyük, an overview of the site and short description of the Late Bronze Age excavations shall be given.

New excavations at Tepebağ Höyük

The province capital of Adana is located in 'Plain Cilicia' on both sides of the Seyhan river (Saros), within spitting distance of the Taurus foothills and approximately 50 km north of the Mediterranean coast (**Figure 1**). The name of the city, Adaniya, appears for the first time in the Hittite sources.[4] The höyük of Tepebağ, which lies directly in the middle of Adana's central quarter, and partially within the Kayalıbağ neighborhood, adjoins the Seyhan river in the east. The settlement, which is estimated to be 360 m wide from north to south and 620 m long from east to west, comprises – together with its lower city – an area of approximately 20 ha. Tepebağ Höyük is one of the highest mounds in the area and extends 15 m above the plain and 40 m above sea level (**Figure 2**).

The former director of the Adana Archaeological Museum, Ali Rıza Yalgın, conducted the first excavation at the site in 1936. In 1942, Remzi Oğuz Arık, then head of the Adana Archaeological Museum, investigated the mound and conducted several small excavations over the following years. Since these investigations reached only a limited depth, they did not provide detailed information about the mound's whole stratigraphy. Halet Çambel investigated the site during her studies of the cultural heritage inventory in the region in 1967, but did not conduct any further excavations. The reports from all these early investigations remain unpublished. Therefore, the current round of excavations were started in 2013 by

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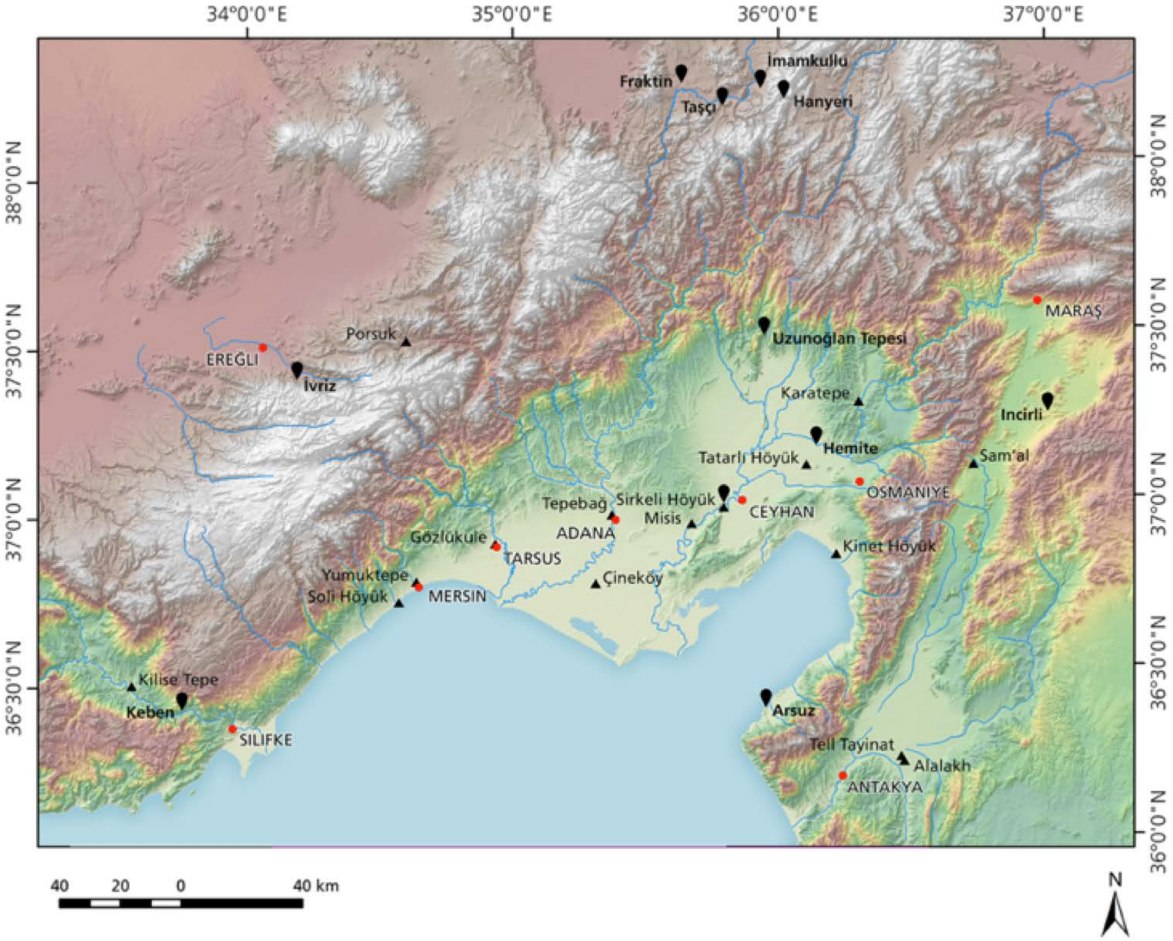
[1] Cf. Cilician Chronology Group 2017.

[2] See the contributions by Jean, Kozal and Ünlü in this volume.

[3] For an overview, see Cilician Chronology Group 2017; see also Girginer and Oyman-Girginer 2020; Gates 2006; Novak *et al.* 2019.

[4] Garstang and Gurney 1959, 61.


34°0'0"E
35°0'0"E
36°0'0"E
37°0'0"E
38°0'0"N
37°30'0"N
37°0'0"N
36°30'0"N
36°0'0"N
Fraktin
İmamkullu
Taşçı
Hanyeri
Porsuk
EREĞLI
İvriz
Uzunoğlan Tepesi
MARAŞ
Karatepe
Incirli
Hemite
Tatarlı Höyük
Sam'al
OSMANIYE
Tepebağ
Sirkeli Höyük
Misis
CEYHAN
ADANA
Gözlükule
TARSUS
Kinet Höyük
Yumuktepe
Soli Höyük
MERSIN
Çineköy
Kilise Tepe
Keben
SILIFKE
Arsuz
Tell Tayinat
Alalakh
ANTAKYA
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20
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40 km
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Figure 1: *Map of Cilicia with modern settlements and relevant archaeological sites.*

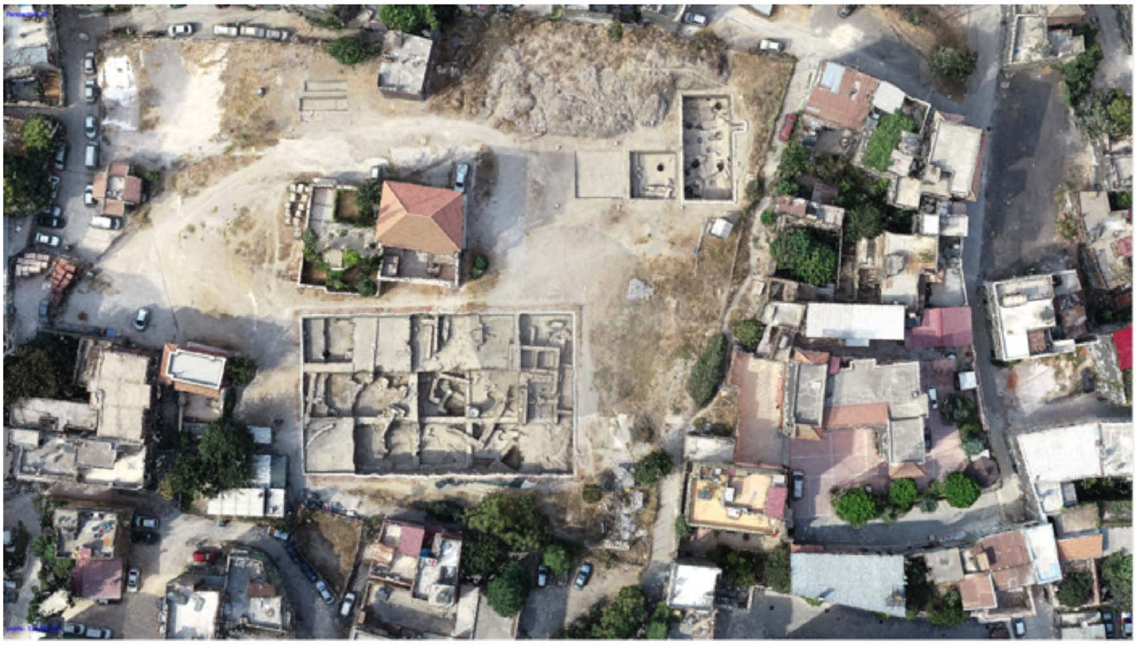

Figure 2: *Aerial photograph of the excavation area at Tepebağ Höyük.*

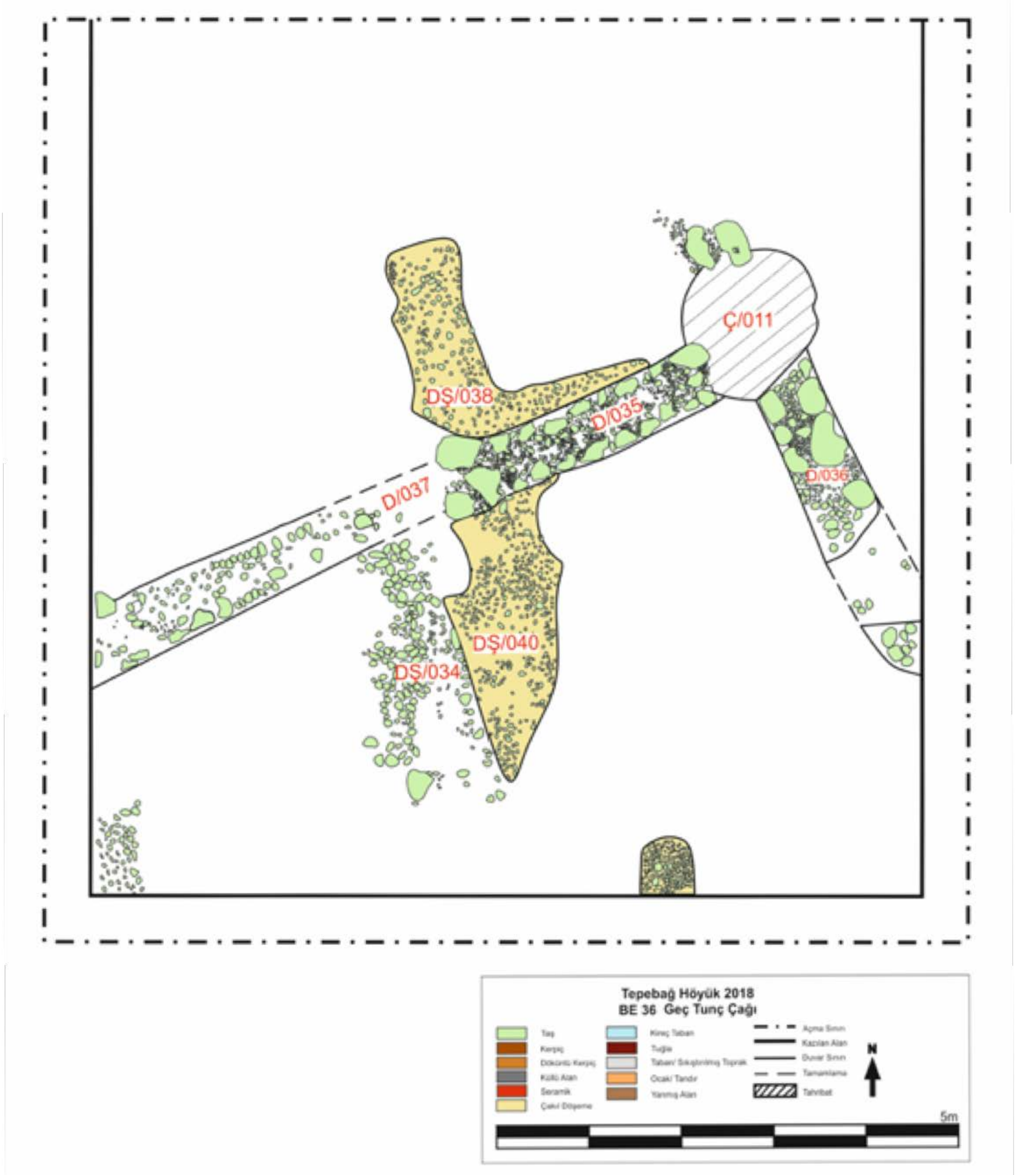
Ç/011
DŞ/038
D/035
D/036
D/037
DŞ/040
DŞ/034
Tepebağ Höyük 2018
BE 36 Geç Tunç Çağı
Taş
Kerpiç
Döküntü Kerpiç
Küllü Alan
Seramik
Çakıl Döşeme
Kireç Taban
Tuğla
Taban/ Sıkıştırılmış Toprak
Ocak/ Tandır
Yanmış Alan
Açma Sınırı
Kazılan Alan
Duvar Sınırı
Tamamlama
Tahribat
N
5m

Figure 3: *Architectural plan of Trench BE 36; Late Bronze Age pebble-floor and walls.*

the Turkish Ministry of Culture and Tourism, with the permission of the General Directorate of Cultural Assets and Museums.[5] Excavations have subsequently been undertaken in several areas and trenches.

In 2016, the new excavations on the summit of the mound reached a depth of approximately 5 m below the surface in 15 trenches. The excavations continued in the season of 2017/2018 (**Figure 2**). On the north-eastern side of Tepebağ Höyük, new trenches (BD/BE36) have been opened to investigate the site's urban development.[6] Here, Late Bronze Age layers were brought to light in 2017, and some architectural features have been discovered. Nevertheless, it is not yet possible to reconstruct coherent

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[5] Since 2013 the excavations have been continuing under the directorate of the Adana Archaeological Museum. Scholars from the Archaeological Department of Çukurova University, Fatih Gülşen and Fatma Şahin, contributed to the work as scientific advisers between 2012–2014 and 2015–2016, respectively. There are also preliminary reports from these campaigns: Şahin 2016; 2017a; 2017b. Since 2017 Deniz Yaşin from Bern University has been in charge of the excavations as scientific consultant.

[6] Yaşin *et al.* 2019, 531–552.

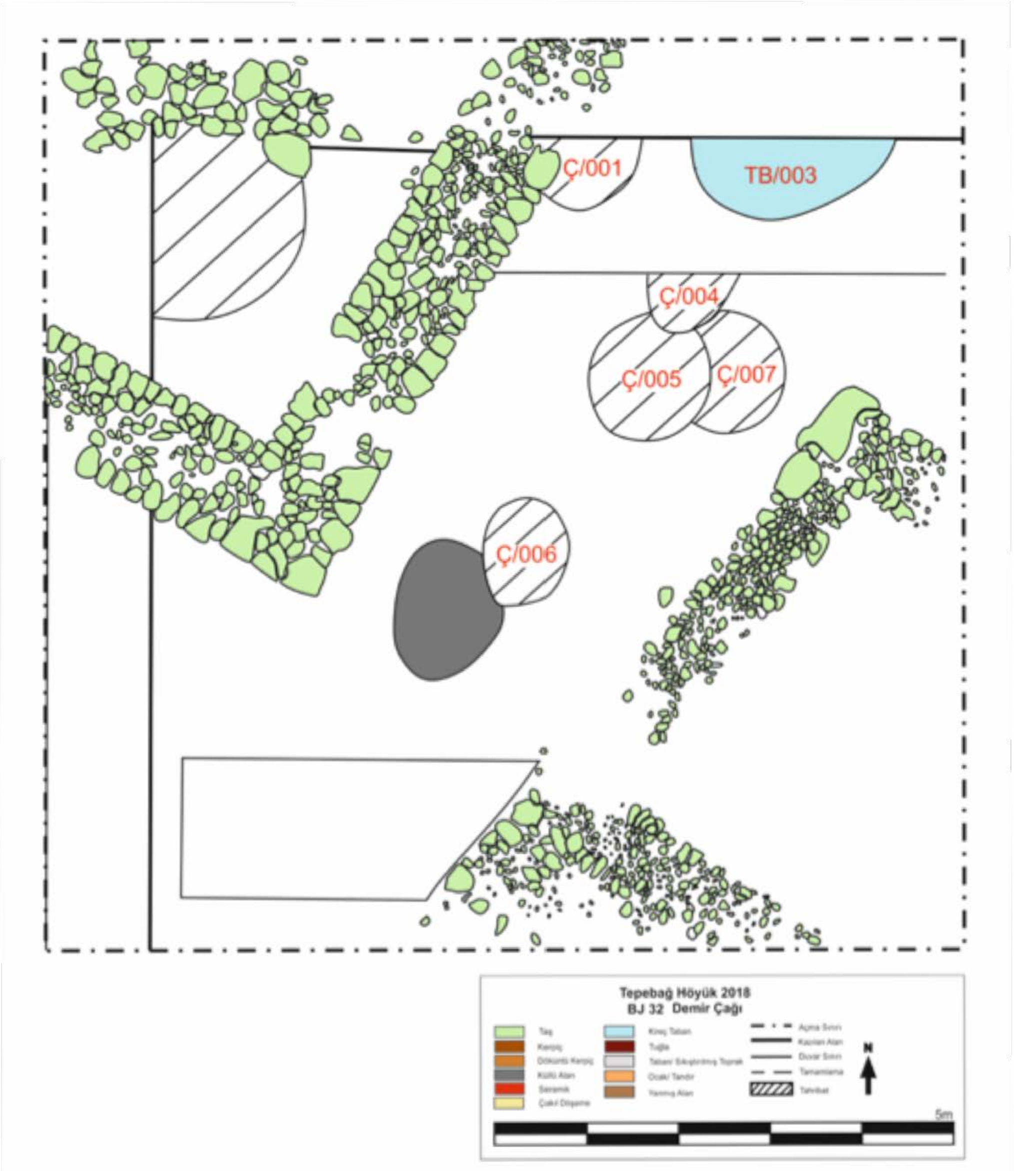
Ç/001
TB/003
Ç/004
Ç/005
Ç/007
Ç/006
Tepebağ Höyük 2018
BJ 32 Demir Çağı
Taş
Kerpiç
Döküntü Kerpiç
Küllü Alan
Seramik
Çakıl Döşeme
Kireç Taban
Tuğla
Taban/ Sıkıştırılmış Toprak
Ocak/ Tandır
Yanmış Alan
Açma Sınırı
Kazılan Alan
Duvar Sınırı
Tamamlama
Tahribat
N
5m

Figure 4: *Architectural plan of Trench BJ32; Iron Age.*

structures within the layout of the settlement. Most of the architectural remains from the Late Bronze Age have been uncovered in Trench BE36 (**Figure 3**); two walls (walls BE36–D35 / BE36–D37 and BE36–D36), possibly delimiting a room of a building disturbed in a corner by a pit, have been discovered. At the south of wall BE36–D37 a poorly preserved pebble-floor has also been uncovered. Nearby, another floor (BE36–DŞ38, BE36–DŞ40) made of pebble stones under the wall, BE36–D35, extends both north and south without interruption.

Further architectural structures of the Late Bronze Age have been uncovered in Trenches BI31 and BJ32, which are situated at the top of the mound. In Trench BJ32 (**Figure 4**), underneath some external structures belonging to the Iron Age (the so-called corridor), the Late Bronze Age levels have been reached. A semi-circular lime floor in Trench BJ32 (BJ32–TB03), which continues under the north profile, has also been uncovered in the same area. Another partially preserved floor was discovered during a sounding in Trench BI31. Characteristic pottery of the Late Bronze Age has been found on both of these floors. Keeping in mind that, until now, excavations took place in small trenches and that there has been a certain degree of disturbance caused by the Iron Age levels, one cannot conclude that this modest amount of architecture is representative of the Late Bronze Age at Tepebağ.

Based on the new comparative stratigraphy of Cilicia that was recently proposed by the Cilician Chronology Group, the Late Bronze Age structures that were uncovered in 2017 at Tepebağ date to the Middle Cilician Period 4 (MCI-4: 1350–1190 BC).[7] This corresponds historically to the Hittite Empire from the reign of Šuppiluliuma I to its collapse. According to the older terminology this period is also denominated as Late Bronze Age II. In 2018, the excavations at the site reached the Late Bronze Age levels, representing the oldest period found until now. Above this level, the Iron Age I and the beginning of the Iron Age II (NC1-3) have been identified through pottery only. The pottery of the Late Bronze Age is associated with deposits, or fill layers and floors, and displays a large variability of wares; Central Anatolian Hittite plain pottery, Cypriot imports, such as white slipped vessels, and Cypriot monochrome wares are significant groups of this assemblage.[8]

The red band decorated pottery

Although the red band decorated pottery represents less than one percent of the Late Bronze Age ceramic assemblage, it seems to be particularly significant to the cultural history of the region. This pottery group is interesting due to the fabric used to produce the vessels and upon which the decoration was applied. A monochrome pottery ware without surface treatment, typical of the Hittite pottery production in Central Anatolia, seems to be attested as well. The so-called Hittite or North Central Anatolian pottery is dominated by this monochrome and undecorated production for which the terms 'drab ware' or 'plain ware' are often used.[9] This type of ceramic is characterized by highly standardized manufacturing techniques and vessel shapes,[10] and is distinguished by its minimal surface treatment and gritty fabric. Economic and administrative aspects of the Hittite State must have led to this high-grade standardization.[11] The textual evidence, despite being limited, proves the involvement of the state in the pottery production of Hittite Anatolia.[12]

Despite the fact that the Late Bronze Age plain ware from Tepebağ Höyük displays the features of Hittite or North Central Anatolian pottery, it is likely to be a local production. The production is wheel-made with medium fabric and can be divided into several sub-groups characterized by gritty fabrics with white, black, and brown fine to medium sized inclusions. Surface color varies from brown (Munsell 7.5 YR 5/3) to light reddish brown (Munsell 5 YR 6/4). Occasionally, a self-slip is visible on the surface. The vessels made with plain ware from Tepebağ Höyük are considered to be part of the typical Central Anatolian shape repertoire.

The application of the red colored single bands or stripes was generally carried out on the upper part of the vessel around the rim, but can also be found on the inside and/or the outside. Although no archaeometric studies have been conducted, it is very likely that the red color used for the decoration was obtained by employing iron-rich clays. The color of the band decoration is light and varies between different tones (Munsell 10R 5/8-5/6; 2.5 YR 5/8). The preserved color still visible on the pottery fragments show that the red band decoration was applied by painting the surface, either using a brush (**Figure 5.1–3, 6.1–4**) or probably also submerging the vessel in a fluid suspension (dipping) (**Figure 6.5–6**). It is important to stress that, although dipping is acknowledged as an application technique, the colored surface of the red band decoration from Tepebağ is different from those obtained through a slip, which seals entirely or partially the vessel surface. Therefore, it can be assumed that the color was applied on these vessels with the intention to create a proper decoration. One can speak of red-slip decoration, but since application with brushes is also attested, we prefer to call this kind of pottery 'red band decorated ware'.

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[7] Cilician Chronology Group 2017, 150–186.

[8] Detailed studies on the pottery of the Late Bronze Age layers have not yet been completed. Therefore, the results described here are preliminary.

[9] Instead of the commonly used denomination 'Hittite', C. Glatz (2009, 129) suggests the term 'North Central Anatolian' as an 'appropriate label for the material culture tradition of the geographical and cultural heartland of the Hittite polity'; see also the comments of D.P. Mielke (2016, 157, footnote 11).

[10] For an overview of the Hittite pottery see Schoop 2011; Mielke 2016; 2017.

[11] Mielke 2016, 162–163.

[12] Mielke 2016, 174–175.

Concerning the shapes of the red-band decorated pottery, bowls – with simple or slightly turned-in rim – are present (**Figure 6.1–4**), along with large shallow plates with thickened rims (**Figure 5**). Based on the so far analyzed material, it seems that the band decoration has mostly been applied to some open shaped vessels. Additionally, it is also attested on small stands (**Figure 6.5–6**).

If we take a closer look at the forms of the red band decorated pottery, the large shallow plates with a thickened rim attract our attention. These are represented by three specimens (**Figure 5.1-3**), on which the red band decoration has been applied on the inside of the lip. Two of these also show the presence of a pot mark. These kinds of plates represent a genuine Hittite pottery form.[13] In the Hittite world, they are generally handmade and consist of coarse fabrics, as it is likely they were used for baking. The largest Hittite examples have diameters of up to one meter. The largest red band decorated examples from Tepebağ Höyük have a diameter of 45.5 cm (**Figure 5.2**), and the smallest 31.5 cm (**Figure 5.3**). The average diameter of all of these examples is 40 cm. Compared to the typical Hittite plates made of coarse fabrics, the Tepebağ ones have rather small diameters.[14] However, a small amount of the Hittite plates were produced with fabrics with medium size inclusions, and these examples have a diameter average of 44 cm, which fits very well with the examples from Tepebağ.[15] The applied decoration and the medium magnitude temper of the examples from Tepebağ Höyük suggest a function that differs from that of the typical Hittite examples. It brings us to think that they were probably used as serving vessels.

The second form on which the red band decorations are applied are the flat bowls with inverted rim (**Figure 6.1–4**). Similar to the plates, the band decoration has been applied on the inside of the vessels around the rim, but it also occurs on the outer part of the lip. Concerning the fabrics, no differences between the band decorated plates and the bowls can be noted. The diameters of the bowls range between 31.5 and 21.5 cm, with an average of 25.5 cm, which fits very well with the Hittite examples.[16] Flat bowls with inverted rim were a common and dominant vessel type within the Hittite pottery repertoire.[17] The majority of this group belongs to the plain ware category, but red and white slipped examples are also known. The postulated serving-vessel function is very likely for this form.

Finally, two stands, with diameters of 16.4 cm and 17.5 cm, complete the assemblage of the red band decorated pottery from Tepebağ Höyük (**Figure 6.5–6**). On these two stands, the red decoration is applied on the inside and the outside of the lip; the stands are also made with the same fabric as two other examples: a plate and a bowl (TBH17 BE 36 S 140.047 and TbH17 BE36 S105.038). One can speculate that the stands were used for the bowls and plates. Although no base of the red band decorated bowls or plates have been found, it is likely that they originally had rounded bases like their Hittite prototypes. Stands are not common within the Hittite vessel repertoire.[18] This is surprising, since many Hittite

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[13] For more on these plates see Mielke 2016, 160–162 and Mielke 2017, 134–136 with further references.

[14] The average diameter of the Hittite examples is around 50 cm (cf. Mielke 2006, 129).

[15] Mielke 2006, 129.

[16] Müller-Karpe 1988, 106; Mielke 2006, 118.

[17] cf. Müller-Karpe 1988, 106–113; Schoop 2003, 173; Mielke 2006, 118–119.

[18] Fischer 1963, 72.

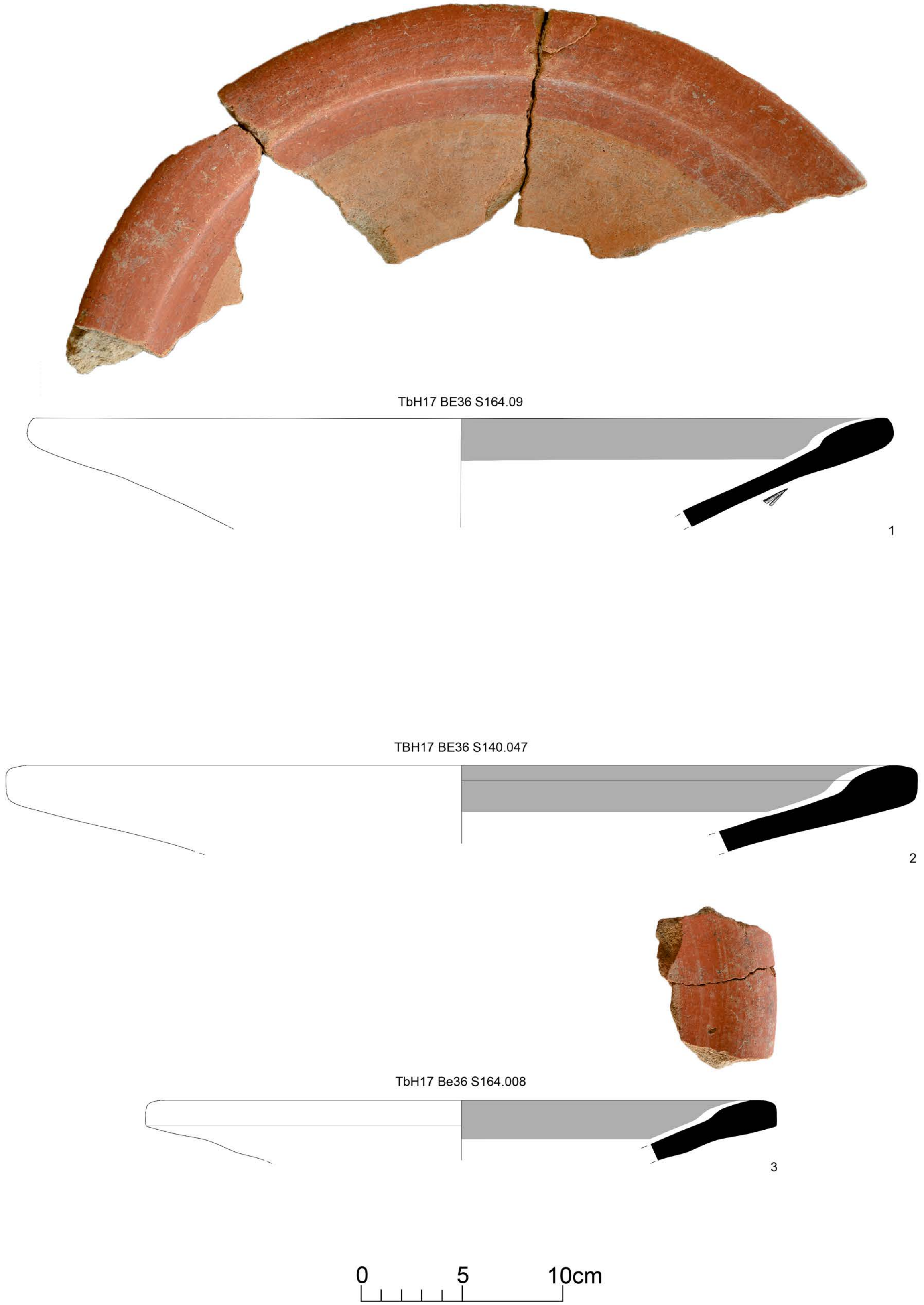
TbH17 BE36 S164.09
1
TBH17 BE36 S140.047
2
TbH17 Be36 S164.008
3
0
5
10cm

Figure 5: *Red band decorated plates from Tepebağ Höyük.*

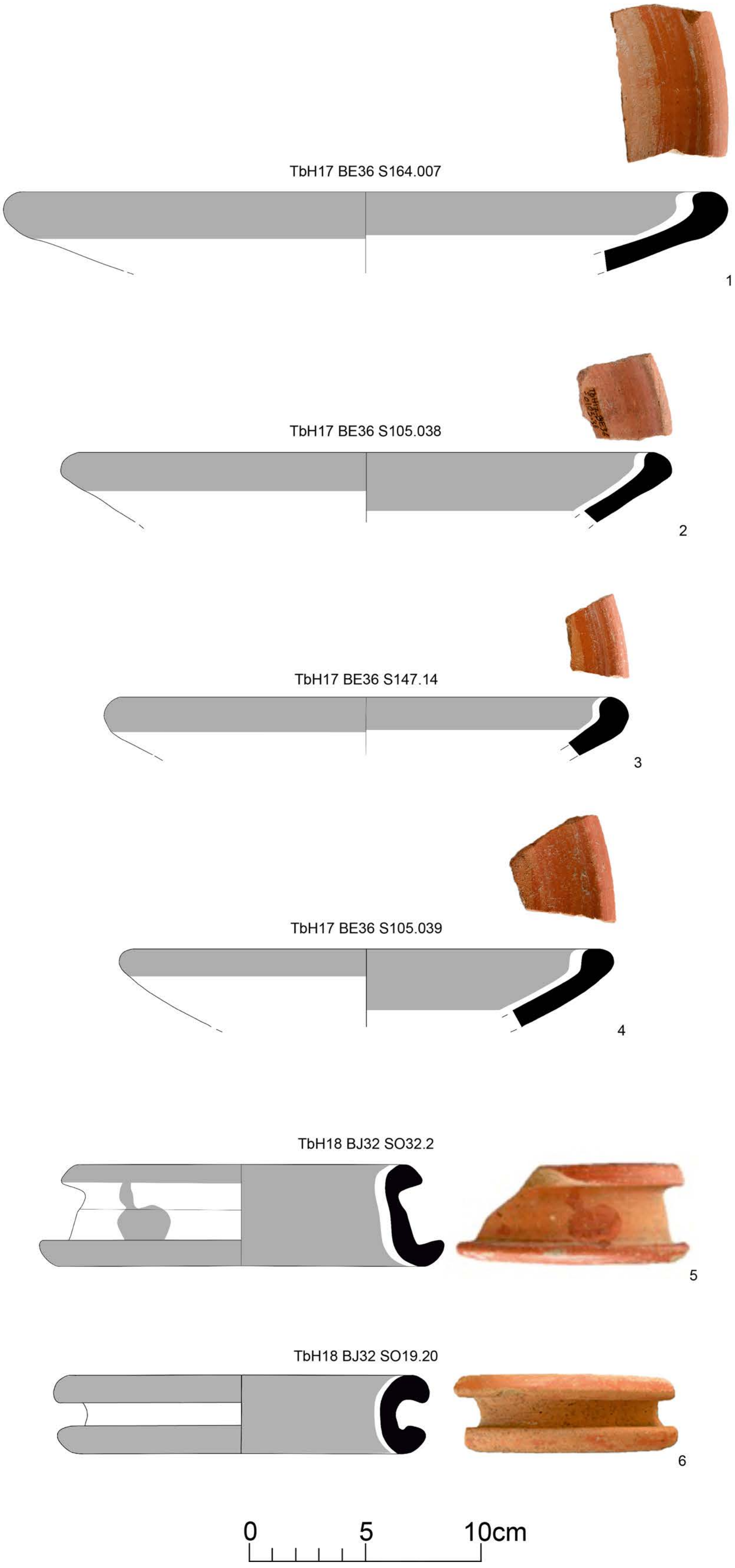
TbH17 BE36 S164.007
1
TbH17 BE36 S105.038
2
TbH17 BE36 S147.14
3
TbH17 BE36 S105.039
4
TbH18 BJ32 SO32.2
5
TbH18 BJ32 SO19.20
6
0
5
10cm

Figure 6: *Red band decorated bowls and stands from Tepebağ Höyük.*

vessels were equipped with rounded or pointed bases.[19] The reason for this discrepancy could be that stands are probably difficult to identify among fragmentary material.[20] To sum up, the spectrum of the red band decorated pottery is very limited and encompasses vessels whose function lies in the broader context of serving foodstuffs.

Comparisons

As presented in the previous section, the forms of the Late Bronze Age red band decorated pottery from Tepebağ Höyük are very similar to those from Central Anatolian sites. The application of a red color surface which coats part of the vessel is also known from the Hittite pottery, but no special investigations of this phenomenon had been conducted until now.[21] Generally, this surface treatment has been applied to the upper parts of carinated large bowls. This partial slip seems to have started in the Kārum period and continued into the Old Hittite period; thereafter, it gradually disappeared and hardly ever occurred in the Empire period. A late appearance of this partial slip was seen as bands or strip-like decorations on the rims of flat bowls.[22] Due to their specific decoration, they were sometimes denominated *Rotrandschalen*.[23] At first glance, these are the best Central Anatolian parallels to our findings, though the story of the red band decorated pottery from Tepebağ Höyük seems to be more complex. Considering that the Late Bronze Age structures uncovered in 2017 date to the Middle Cilician period 4 (MCI-4: 1350–1190 BC), the red band decorated pottery from Tepebağ Höyük might be interpreted as a late impact of a phenomenon which was disappearing in the Hittite homeland. However, this should apply to the flat bowls with inverted rims but it is not clear whether it involves the stands as well. Notably, there are no comparisons in the Hittite pottery repertoire of Central Anatolia for the red band decorated large shallow plates with thickened rims. Indeed, these kinds of plain ware plates were never decorated in this region.[24] The supposed late appearance of the red band decoration in Cilicia and the fact that such plates were characterized by partial coating, leads to the assumption that this pottery represents a regional phenomenon, possibly entailing an independent development. A closer look at comparable findings in the region is necessary.

Examples similar to the red band decorated pottery from Tepebağ Höyük have been documented at several sites in Cilicia. At Tarsus-Gözlükule, bowls of Central Anatolian tradition were also characterized by this kind of decoration around the rim,[25] and new excavations at Sirkeli Höyük have also brought to light similar findings.[26] Moreover, bowls with band decoration are reported from Kinet Höyük among the Late Bronze Age II material (Period 15–13). At this site, the pottery belonging to this period displays Central Anatolian characteristics; however, the vessels should be connected to the so-called fine ware pottery.[27]

The case of the red band decorated pottery from Cilicia might show either the archaizing impact of a Central Anatolian tradition, or an example of regional development. Since horizontal band decoration is in general one of the most basic motifs of painted pottery, looking for a valid regional origin is challenging. During the Middle Bronze Age, band decoration was common among the so-called Khabur

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[19] Mielke 2006, 145–147.

[20] Mielke 2006, 44.

[21] Only the short comments of Schoop 2011, 260 can be mentioned in this respect.

[22] Schoop 2011, 260.

[23] Czichon 2008, 270.

[24] The string impressions that are often found on these plates are non decorative. They are remaining traces of the production process (Mielke 2006, 128–136).

[25] Goldman 1956, 183, Fig. 309: no. 1009; Ünlü 2005, 150. Ünlü Fig. 7, in this volume.

[26] Kozal in press; 2019, 270, Fig. 234: 2–4, 249: 1–2. See also the contribution presented by Kozal in this volume. The examples from Sirkeli Höyük have a diameter of around 45 cm. They display a very similar example to those from Tepebağ.

[27] Gates 2001, 138– 139, Fig. 2, 9–11.

Ware, but this was preferably applied on closed shapes, such as pitchers, jars, or pithoi.[28] The painted band decoration does not seem to be related to this tradition. However, a closer look at the Syrian sites, particularly those from Jezirah, reveals further possible connections. Here, the so-called Red-Edged Ware, because of its band decoration on the inside, outside, and top of the rim, shows similarities with the specimens from Tepebağ Höyük.[29] In the local chronology of Jezirah**,** this ware dates to the so-called Middle Jezirah I, which matches the Mitannian rule and fits roughly between 1500 and 1300 BC.[30] The most significant development of this ware occurred during the Middle Jezirah IB,[31] as is especially evident at sites such as Tell Brak, Tell Mohammed Diyab, Tell Bderi, and Tell Fecheriye.[32] Nonetheless, Red-Edge Ware is also attested at sites in inner Syria, such as at Tell Mishrife/Qatna. North Syrian influences are not surprising for Cilicia. Considering that the region was under the Mitannian rule, one might expect a more visible impact from the East on the material culture. It should be considered that a general lack of standardization and variability of shapes and techniques characterized the Mitannian pottery of the 15th and 14th centuries BC. P. Pfälzner has pointed out that, in contrast to the strongly standardized Assyrian ceramics, Mitannian pottery shows rich variation due to a low centralized-production within a complex network system.[33] According to Pfälzner, these aspects might be related to the presence, within the Mitannian state, of individual workshops and to a complex network of distribution of the pottery.[34] This might be a reason for the low visibility of the Mitanni impact on the pottery. However, there is still insufficient data to support a direct link between Mitannian Red-Edged Ware and the red band decorated pottery from Tepebağ Höyük and the other Cilician sites.

Conclusion

The appearance of red band decorated pottery from Tepebağ Höyük, with its very limited vessel repertoire, represents a complex phenomenon. A direct impact of the Hittite pottery tradition can be seen at first glance, but it seems that an independent regional influence is more likely. One of two arguments which support this view is that this decoration is realized on a typical Hittite shape, i.e. a large shallow plate with a thickened rim, which occurs in Central Anatolia exclusively as non-decorated plain ware. The second argument is the chronological discrepancy between the Central Anatolian prototypes and the appearance of this decoration at Tepebağ Höyük as well as at other sites in the region. This might also lead to the assumption that the ceramic production in Cilicia did not exclude the involvement of local workshops. In this framework, Tepebağ Höyük can be seen as a site characterized by strong local tradition and, at the same time, opened to influences from Hittite Central Anatolia. Therefore, the red band decorated pottery from Tepebağ Höyük can be interpreted as a syncretism of the Hittite and the Cilician pottery traditions. Nevertheless, future research is required in order to contribute to the topic with more data and appropriately answer the questions raised herein.

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[28] Hrouda 1957, 22–27.

[29] Pfälzner 2007, 242. According to P. Pfälzner, this ware is exclusively associated with flat bowls, either straight sided or carinated examples.

[30] Pfälzner 2007, 239, Fig.4.

[31] Pfälzner 2007, 246–247.

[32] Oates *et al.* 1997, 73, Fig. 187/135–136, 144–145, 147, 149–152, Fig. 188/155; Hrouda 1961, 221, Fig. 15b; Bachelot *et al.* 1990, Fig. 19/1; Pfälzner 1995, 37–38; Fig. 20, 77; Novak and Pfälzner 2003.

[33] Pfälzner 2007, 260–261.

[34] Pfälzner 2007, 257–258.

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Figure 5.1: TbH17 BE36 S164.009; North fill layer, related to wall BE36.D37; Plate; White, black, and brown inclusions (fine to medium size and medium quantities); Medium firing; Brown colour (Munsell 7.5 YR 5/3); Red band painted (Munsell 10R 5/6) on the inner surfaces of the rim, pot mark on the outside.

Figure 5.2: TbH17 BE36 S140.047; North fill layer, related to wall BE36.D37; Plate; White, black, and brown inclusions (fine to medium size and medium quantities); Medium firing; Brown colour (Munsell 7.5 YR 5/3); Red band painted (Munsell 2.5 YR 5/8) on the inner surfaces of the rim, pot mark on the outside.

Figure 5.3: TbH17 BE36 S164.008; North fill layer, related to wall BE36.D37; Plate; White and black inclusions (fine to medium size and medium to high quantities); Medium firing; Brown colour (Munsell 7.5 YR 5/3); Red band painted (Munsell 10R 5/8) on the inner surfaces of the rim.

Figure 6.1: TbH17 BE36 S164.007; North fill layer, related to wall BE36.D37; Flat bowl; White and black inclusions (fine to medium size and low quantities); Medium firing; Light reddish brown colour (Munsell 5 YR 6/4); Red band painted (Munsell 2.5 YR 5/6, 2.5 YR 5/4) on the inner and outer surfaces of the rim.

Figure 6.2: TbH17 BE36 S105.038; Pit BE36.Ç09; Bowl; White and black inclusions (fine size and medium quantities); Medium firing; Brown colour (Munsell 7.5 YR 5/3); Red band slip/painted (Munsell 10R 5/6) on the inner and outer surfaces of the rim.

Figure 6.3: TbH17 BE36 S147.014; Fill layer, related to wall BE36.D35; Bowl; White, brown, and black inclusions (fine size and low quantities), lime inclusions (fine size and low quantities); Medium firing; Light reddish brown colour (Munsell 5 YR 6/4); Red band slip/painted (Munsell 10R 5/6) on the inner and outer surfaces of the rim.

Figure 6.4: TbH17 BE36 S105.039; Pit BE36.Ç09; Bowl; White and black inclusions (fine size and medium quantities), lime inclusions (fine size and medium quantities); Medium firing; Light reddish brown colour (Munsell 5 YR 6/4); Red band slip/painted (Munsell 10R 5/6) on the inner and outer surfaces of the rim.

Figure 6.5: TbH18 BJ32 S032.002; Deposit on lime plastered floor BJ32. T05; Stand; White and black inclusions (fine to medium size and medium to high quantities); Medium firing; Light reddish brown (Munsell 5 YR 6/4); Red band slip/dipped (Munsell 10R 5/6) on both the upper and the bottom rims. Red slip on the inside.

Figure 6.6: TbH18 BJ32 S019.020; Northeast fill layer; Stand; White and black inclusions (fine to medium size and medium quantities); Medium firing; Light reddish brown colour (Munsell 5 YR 6/4); Red band slip/dipped (Munsell 10R 5/6) on both the upper and the bottom rims. Red slip on the inside.

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Painted Pottery Traditions at Sirkeli Höyük in the 2nd Millennium BC

Ekin Kozal

Abstract

This article presents the painted pottery traditions at Sirkeli Höyük throughout the 2nd millennium BC. Since the excavations and material studies in Sirkeli Höyük are ongoing, only a preliminary overview can be given. Although found in every assemblage, painted pottery constitutes a small proportion of the assemblages both in the Middle and Late Bronze Ages. Represented painted wares/styles/decorations include the so-called Syro-Cilician Painted Ware in the Middle Bronze Age and Red Slip/Red-edged/Red-banded, Monochrome or Bichrome Painted Wavy-line, and Cross-hatched Wares of the Late Bronze Age.

Keywords

Sirkeli Höyük, painted pottery, Middle Bronze Age, Late Bronze Age, Cilicia

Özet

Bu makalede, Sirkeli Höyük 2. binyıl boya bezemeli seramikleri ele alınmaktadır. Kazıların ve seramik çalışmalarının halen devam etmesi nedeniyle sadece ilk bulgular sunulmaktadır. Boya bezemeli seramikler Orta ve Geç Tunç Çağına ait tüm toplama birimlerinde bulunmasına rağmen, oranları oldukça azdır. Boyalı mal grubu/stili/bezemesi Orta Tunç Çağı'nda sözde Suriye-Kilikya boyalıları (Syro-Cilician painted), Geç Tunç Çağı'nda ise Kırmızı Astarlı/Kırmızı Kenarlı/Kırmızı Bant Bezemeli (Red Slip/Red-edged/Red-banded), Monochrome veya Bichrome Boya Dalga Bezemeli (Monochrome or Bichrome Painted Wavy-line) ve Kafes Bezemeli (Cross-hatched) mal grupları ile temsil edilmektedir.

Anahtar Kelimeler

Sirkeli Höyük, boya bezemeli seramik, Orta Tunç Çağı, Geç Tunç Çağı, Kilikya

Introduction[1]

Sirkeli Höyük was one of the largest urban centers in eastern Plain Cilicia in the Middle and Late Bronze Ages. The site is located on a main road from east to west, as well as on a route connecting to the Mediterranean coast in the south and to the Anatolian Plateau in the north (**Figure 1**).

The main mound is on the left bank of the Ceyhan River (possibly ancient Puruna and classical Pyramos), but the settlement extended on both sides of the river. The site is situated at the passage through the

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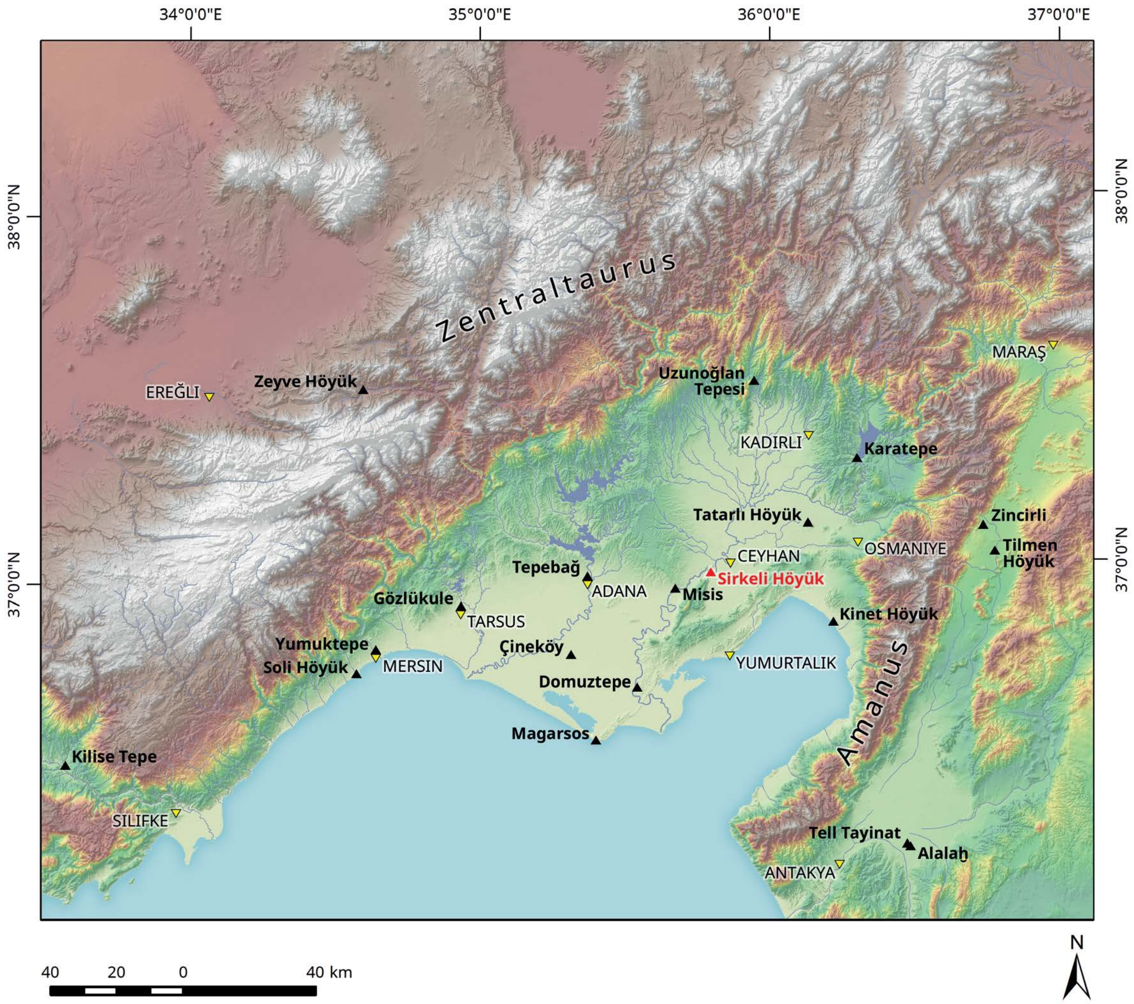
[1] I would like to extend my thanks to the editors of this book, Dirk Paul Mielke and Federico Manuelli, as well as to Sirkeli Höyük's excavation director Mirko Novák. Study of Sirkeli Höyük's Middle Late Bronze Age pottery assemblages is supported by the Alexander-von-Humboldt Stiftung and Freiburg University, Department of Near Eastern Archaeology and Languages, Marlies Heinz and Regine Pruzsinszky.

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 177–203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Zeyve Höyük
EREĞLI
Uzunoğlan Tepesi
MARAŞ
KADIRLI
Karatepe
Tatarlı Höyük
Zincirli
Tilmen Höyük
OSMANIYE
CEYHAN
Sirkeli Höyük
Tepebağ
ADANA
Misis
Gözlükule
TARSUS
Kinet Höyük
Yumuktepe
Soli Höyük
MERSIN
Çineköy
Domuztepe
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Figure 1: *Location of Sirkeli Höyük (map by S. Rutishauser, Sirkeli Höyük Project).*

Misis mountains that connects the Yukarı Ova with the Çukurova plain, both of which are of agricultural and economic importance as they are very fertile.[2] The site covers a large area with different sectors of occupation defined as the mound (inner and outer citadel), upper city (including necropolis), northern lower city, and southeastern lower city, as well as the peripheral settlement on the other bank of the Ceyhan river. The proper mound consists of the inner citadel at its highest part, which is subdivided into an almost circular upper part and an adjacent trapezoidal lower plateau, i.e. the outer citadel to the north of it. The mound measures 350 x 300 m and the settlement occupies an area of ca 80 ha. The mound is surrounded by an extensive lower town in the north, west, and south and an upper town in the southwest and south as well as a suburb or satellite site on the opposite side of the river (**Figure 2**).[3] Although the research is ongoing, it is clear that not all parts of the settlement were occupied during all periods. The Chalcolithic and Early Bronze Age settlement seems to have been restricted to the mound with very few pottery fragments found in the northern lower town, however, more evidence is needed.[4]

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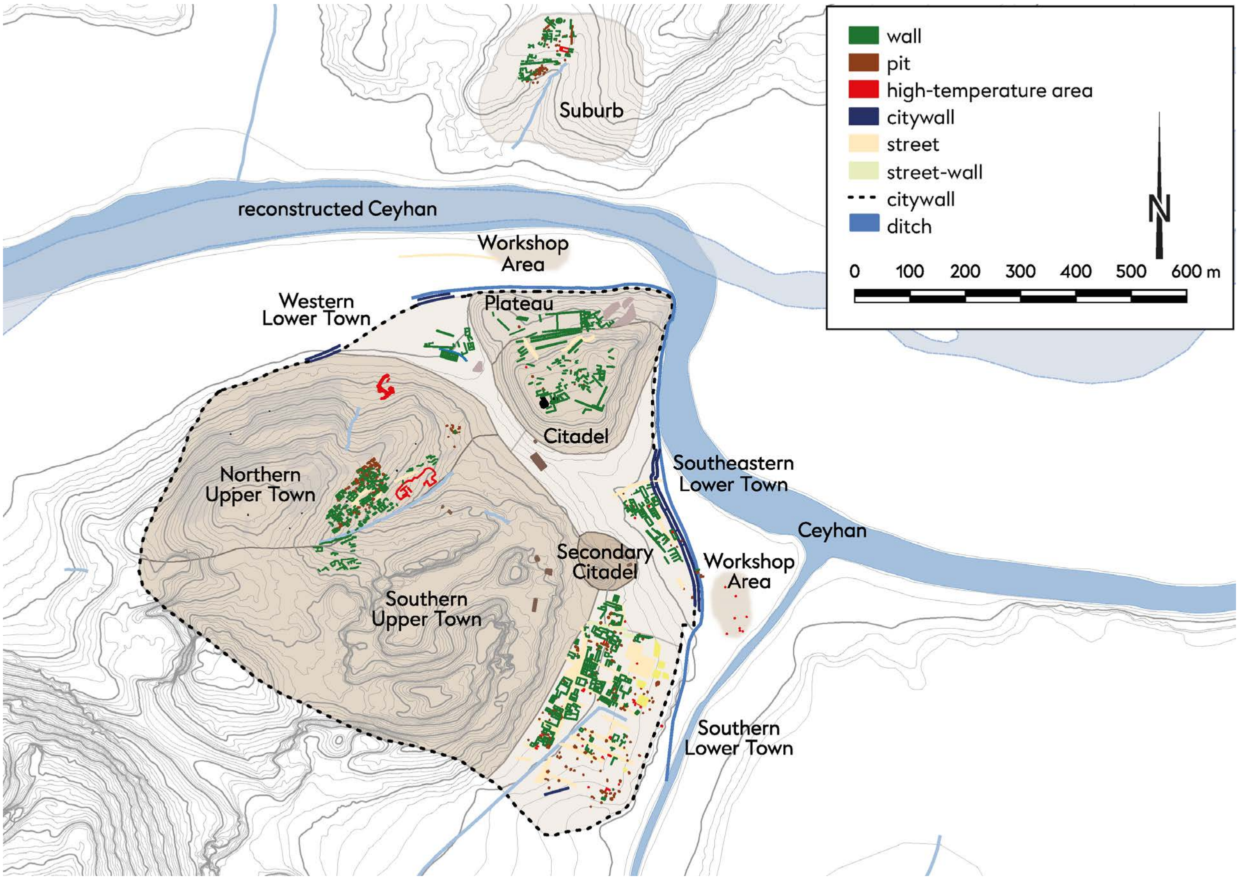
[2] Kozal and Novák 2013, 229; Rutishauser 2017, 121–122.

[3] Kozal and Novák 2013, 229–230.

[4] Ahrens *et al.* 2010, 55–56; Yaşin 2019, 72.


wall
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high-temperature area
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street
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citywall
ditch
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Suburb
reconstructed Ceyhan
Workshop Area
Western Lower Town
Plateau
Citadel
Northern Upper Town
Southeastern Lower Town
Ceyhan
Secondary Citadel
Workshop Area
Southern Upper Town
Southern Lower Town

Figure 2: *Settlement structure of Sirkeli Höyük (map by S. Rutishauser, Sirkeli Höyük Project).*

In the Middle Bronze Age, Sirkeli Höyük gained an urban character that continued into the Iron Age, with a reduction of size during the Late Bronze Age. The Middle Bronze Age was a flourishing period with substantial architecture and material. Middle Bronze Age levels have been excavated on the citadel by J. Garstang in Trench E,[5] B. Hrouda, and H. Ehringhaus in Areas 2–4, 6, 13–18,[6] and by the current team in the step trench of Sector A and the Stone Building in Sector E (**Figure 3**).[7]

Substantial architectural remains both on the inner and outer citadel have been recorded and published by B. Hrouda.[8] The current team has also conducted a survey in the settlement of Sirkeli Höyük in order to examine the borders and the development of the site through time. The distribution of pottery shows that the Middle Bronze Age settlement was located on the mound (inner and outer citadel) extending to the northern lower town and to the opposite bank, as well as to the southeastern lower city. In the Late Bronze Age, the settlement was mainly concentrated on the mound. Late Bronze Age levels have been discovered in the excavations of B. Hrouda in Area 6.2,[9] as well as by the current team in Sectors A,[10] D, and E (inner and outer citadel).[11] Relatively few Late Bronze Age finds have been discovered in

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[5] Garstang 1938, Pl. 16–17.

[6] Ahrens *et al.* 2010, 56–58; Ehringhaus *et al.* 1999, Fig. 29–33; Hrouda *et al.* 1997, 98–100, 103, Fig. 6, 9, 13; Novák and Kozal 2013, 416, Fig. 8.

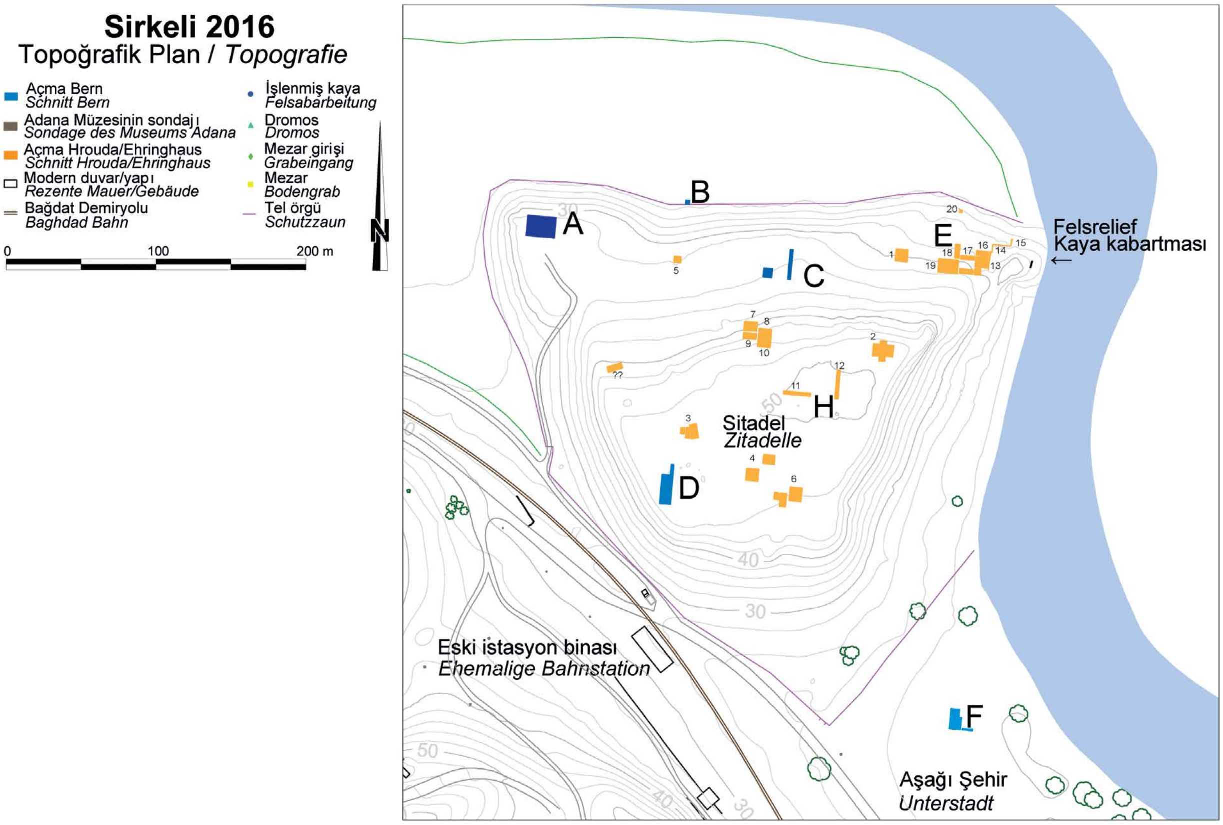
[7] Kozal and Kulemann-Ossen 2019, 210–234.

[8] Ehringhaus *et al.* 1999, 129, Fig. 30.

[9] Hrouda *et al.* 1997, 99–100; von Peschke 2019b, 248–261.

[10] Ahrens *et al.* 2019, 147–166.

[11] Von Peschke 2019a, 291–305.


Sirkeli 2016
Topoğrafik Plan / *Topografie*
Açma Bern *Schnitt Bern*
Adana Müzesinin sondajı *Sondage des Museums Adana*
Açma Hrouda/Ehringhaus *Schnitt Hrouda/Ehringhaus*
Modern duvar/yapı *Rezente Mauer/Gebäude*
Bağdat Demiryolu *Baghdad Bahn*
İşlenmiş kaya *Felsabarbeitung*
Dromos *Dromos*
Mezar girişi *Grabeingang*
Mezar *Bodengrab*
Tel örgü *Schutzzaun*
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200 m
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B
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H
Felsrelief
Kaya kabartması
Sitadel
Zitadelle
Eski istasyon binası
Ehemalige Bahnstation
Aşağı Şehir
Unterstadt
30
40
50

Figure 3: *Excavated areas, previous and current excavations (map by S. Rutishauser, Sirkeli Höyük Project).*

the northern lower town and the suburb.[12] Late Bronze Age material was not found either in the survey or excavations in the southeastern lower town. A short summary of Late Bronze Age pottery is in print elsewhere.[13] In the Iron Age, there was an extensive growth in the settlement covering all areas, i.e. the mound, the northern lower town on both sides of the river, the southeastern lower town, as well as the upper city and necropolis. In the Hellenistic period, so far only domestic architecture has been excavated, mainly located on the mound.[14]

In Sirkeli Höyük painted pottery is evident throughout the 2nd millennium BC.[15] The painted types form part of the daily use pottery assemblages. Local Middle Bronze Age wares comprise Syro-Cilician Painted Ware, Standard Ware (fine, medium, coarse), Red Slip, Brown Slip, Grey Burnished Ware, Red Gritty Ware, and Mineral Cooking Ware. Local Late Bronze Age Wares consist of Syro-Cilician Painted Ware, Monochrome or Bichrome Painted Wavy-line Ware, Cross-hatched Ware, Standard Ware (fine, medium, coarse), Red Slip, Brown Slip, Red-Edged, Red Banded, Grey Burnished Ware, White Filled Black Impressed Ware, and Mineral/Shell Cooking Ware. Macroscopic examination shows that the painted pottery types are painted versions of the plain pottery fabrics. In the Middle Bronze Age, clays of Red Gritty and Standard Wares were used for painted wares and likewise in the Late Bronze Age, the clay of Standard Ware was used. Since this type of decoration is widespread, it is preferred here to use the term ‘style’ or ‘decoration’ instead of ‘ware’. Some of the painted pottery styles discussed in this article have a wide distribution not only in Cilicia, but also in other regions, i.e. Central Anatolia, Northern Levant, and Mesopotamia. The painted pottery must have been produced from local clays at each site. Although the clay is different, the painted decoration is the same, similar or related. In general, in Sirkeli Höyük painted pottery is rare among the assemblages throughout the Middle and Late Bronze Ages (varying between 15% in the Middle Bronze Age and 2% in the Late Bronze Age II), which shows that the demand was low, which might be due to the fact that pottery with painted decoration was less affordable compared to the undecorated wares. Production of painted wares involves additional tasks such as obtaining raw materials and production of paint.

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[12] Kozal *et al.* 2019, 64–85.

[13] Kozal in press; Kozal 2019a, 186–188; 2019b, 309–315; 2019c, 263–270.

[14] Kreutz 2011; Yıldız 2016.

[15] Kulemann-Ossen and Mönninghoff 2019.

This article examines so-called 'Syro-Cilician Painted Ware' appearing first in the Middle Bronze Age, and which continued into the succeeding period (Late Bronze I) and Red Slip/Red-Edged/Red Banded, Monochrome or Bichrome Painted Wavy-line Ware, and Cross-hatched painted decorations of the Late Bronze Age.

Middle Bronze Age Painted Wares: 'Syro-Cilician Painted' Style

'Syro-Cilician Painted Ware' is one of the most common names given to a pottery type with distinctive geometric and figural painted decoration. Various names have already been given to this pottery type depending on its place of discovery, which were later gathered under a general term of 'Syro-Cilician Painted' or 'Amuq-Cilician Painted Ware'. First, Einar Gjerstad referred to this ware as 'Painted I Wheelmade'.[16] Hetty Goldman later classified this ware under 'Light Clay Ware', which includes different types such as painted and unpainted.[17] In 1953, Veronica Seton-Williams published an article about this ware, which called attention to its wide distribution, but did not propose a specific name.[18] Furthermore, Johnatan Tubb uses 'Amuq-Cilician Ware',[19] whereas Patty Gerstenblith and Tine Bagh prefer 'Syro-Cilician Painted Ware'.[20] This type of pottery has been found in a broader geographical area than is understood from its name, including Central and Southern Anatolia as well as North Syria and Mesopotamia.[21] In Central Anatolia it has been discovered at Kültepe and Acemhöyük.[22] In Cilicia it has been found at various sites such as Mersin-Yumuktepe,[23] Tarsus-Gözlükule,[24] Kinet Höyük,[25] Tatarlı Höyük besides Sirkeli Höyük.[26] Éric Jean, who studied the 2nd Millennium BC materials and cultures of Cilicia in his doctoral thesis, shows clearly that Syro-Cilician Ware is only present in Plain Cilicia, whereas it has so far not been found either at the Kilise Tepe excavations or in surveys in Rough Cilicia.[27] An exception are two fragments discovered in Maltepe, a Bronze Age site in the Göksu Valley.[28] In the Amuq Plain, the Alalakh excavations yielded great amounts of this ware and it is also present at Tell Judaidah as well as at other sites in the Amuq.[29] Beyond Amuq, Tilmen Höyük, Oylum Höyük, Chagar Bazar, Ebla, Tell Ahmar,

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[16] Gjerstad 1934, 173, Fig. 9.

[17] Goldman 1937, 264, 267, Fig. 9–10, 12; Goldman 1956, 165.

[18] Seton-Williams 1953.

[19] Tubb 1981.

[20] Bagh 2003; Gerstenblith 1983, 64.

[21] Bieniada 2009.

[22] For Kültepe see Özgüç 1950, Pl. 60: 327–328, 341, Pl. 79, 616–617. For Acemhöyük see Türker 2008, 205–207, cat. no. 362, Pl. 55.

[23] Garstang 1953, Fig. 143–144.

[24] Some examples: Goldman 1956, 165, Fig. 287, 295, 370, 372, 898.

[25] Gates 2000, 85–87, Fig. 6; 2009, 186, Fig. 12.

[26] For other sites in Cilicia see Jean 2010; Seton-Williams 1953.

[27] Jean 2010, 51.

[28] Mellaart 1958, Fig. 61–62.

[29] For Alalak see Bulu 2017a, 189, Fig. 9; 2017b; Heinz 1992, 54–62; Some examples: Woolley 1955, 340, Pl. 84–85, 91–92. For Tell Judaidah Swift 1958, Fig. 1–2. For other sites in the Amuq see Bulu 2017a, 191.

Qatna, and Ugarit have yielded Syro-Cilician Painted Ware.[30] An overseas example was discovered at the Aya Paraskevi tomb in Cyprus.[31]

Although the terminologies imply that there is one single ware or style, it is known among pottery specialists that chronological and site-based or regional differences are possibly present. So far these differences could not be fully explained since the site-based studies are still ongoing and comparisons cannot yet be made. Such a site-based comprehensive survey will guide us in the study of the interregional interactions in the Middle Bronze Age. Once the site-based studies are completed, scholars may be able to consider the reasons and consequences of sharing a common style and material transport within such a vast geographical area. Similarly, the origin of this style is also not conclusively known. However, the ware is abundant only in two regions, which are Plain Cilicia and the Amuq. The limited representation of the ware in Central Anatolia, Rough Cilicia, Cyprus, North Syria, and Mesopotamia indicates that they are hypothetically distributed in these regions as imports. Therefore, the terminology 'Amuq-Cilician Painted Ware' proposed and used by Tubb would point to its production areas or main distribution areas.[32] In comparison 'Syro-Cilician Painted Wares' would refer only to its main distribution areas, leaving out the other areas of Cyprus, Mesopotamia, and Central Anatolia. Neither of the terminologies reflect the archaeological difference between Plain and Rough Cilicia by generalizing two distinct regions under one name of 'Cilicia' or referring to only Plain Cilicia by utilizing the name 'Cilicia'. Despite these deficiencies, one of the traditional terminologies, i.e. 'Syro-Cilician Painted Ware' is used in this article without any new proposal as the research is still ongoing.

Considerable amounts of this ware have been found at Sirkeli Höyük, which supports the claim that it was locally produced as the imported wares usually represented with a percentage less than 1%. Two main types have been identified so far, which are classified here as Syro-Cilician Painted Handmade and Syro-Cilician Painted Wheelmade. These two types correspond to the general description of the ware by Seton-Williams,[33] who grouped these two types under one general ware definition: 'The paste of these vessels is red, buff, or brown, with a cream, buff or light brown slip. They are usually handmade, though wheelmade examples are said to have come from Mersin'. However, the material from Sirkeli Höyük demonstrates that there are two distinct types that differ from each other by means of clay, production technique, and surface treatment.

Syro-Cilician Painted Handmade (Figures 4–5, Cat. 1–4)

Syro-Cilician Painted Handmade is produced from reddish clay that is very similar to 'Red Gritty Ware' known from Gözlükule since the Early Bronze Age,[34] but it has better levigated clay with a few small white inclusions. This ware is always handmade. So far, this ware is only represented with closed forms. A cream slip is always applied prior to adding the painted decoration. The color of the paint varies between brown, light brown, and light reddish brown. The motifs are geometric such as parallel, diagonal, tangent, and wavy lines. An eye motif is also represented at the mouth of trefoil pitchers either alone or between two sets of double lines (framed eye) (**Figure 4, Cat. 1–3**). The upper double line is located under the rim and the lower double line connects to the upper part of the handle on the neck of the vessel (**Figure 4, Cat. 1**). The handle is decorated with a herringbone motif. The upper body is covered with multiple sets of horizontal double bands filled with diagonal dashes (framed dash). The vertical ladder motif is also used. Radials on the rim are also common.

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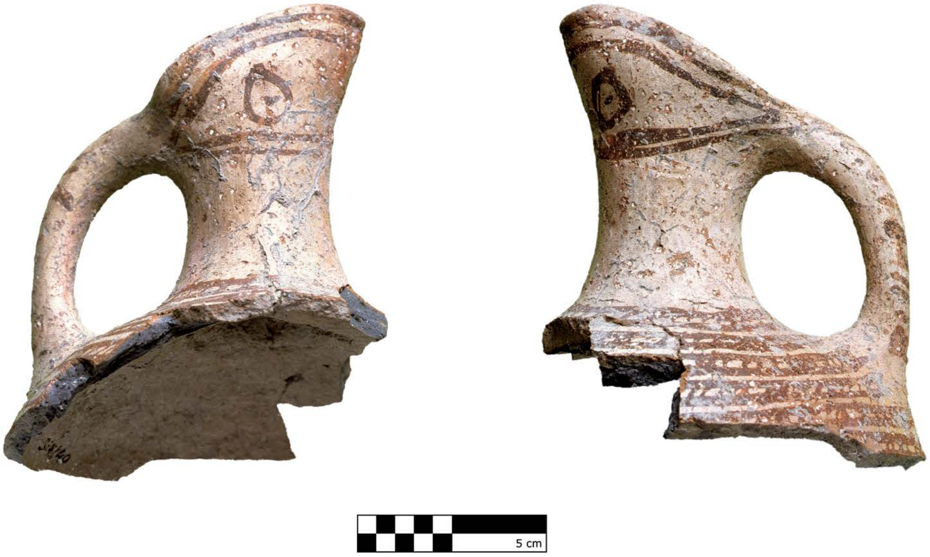
[30] Bagh 2003; Çatalbaş 2008; Gerstenblith 1983, 64–70, Fig. 20–21, 23; Heinz 1992; Hrouda 1957, 27–31, Pl. 11; Jamieson 2005; Matthiae 1989, 303–313; Seton-Williams 1953, 61–64, Fig. 2–3, 4:1, 5:4, 6, 9.

[31] Merrillees and Tubb 1979, Pl. 24, 1–2.

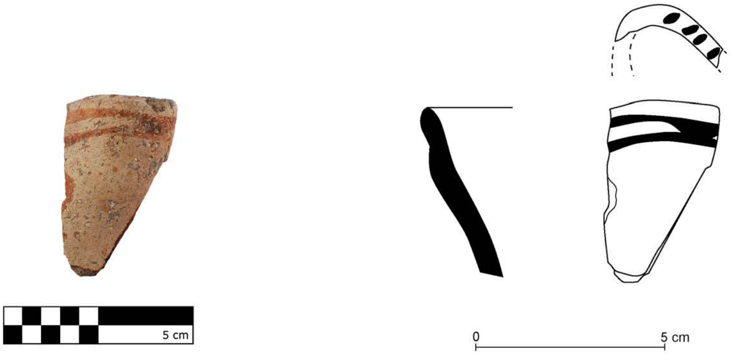
[32] Tubb 1981.

[33] Seton-Williams 1953, 58.

[34] Goldman 1956, 132–133.



Hrouda 1997,99, fig.9
1



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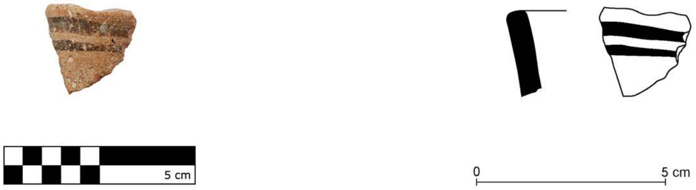

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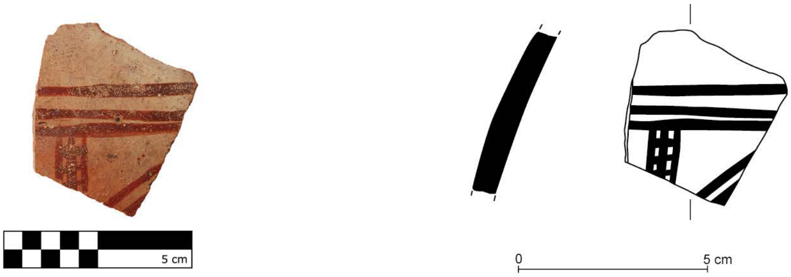
3

Figure 4: *Syro-Cilician Handmade Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



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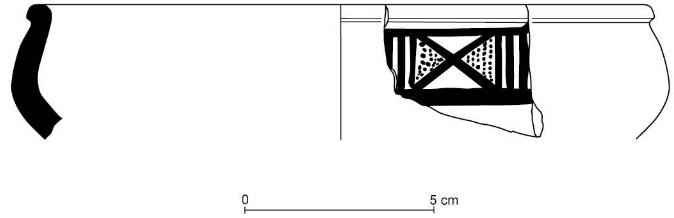

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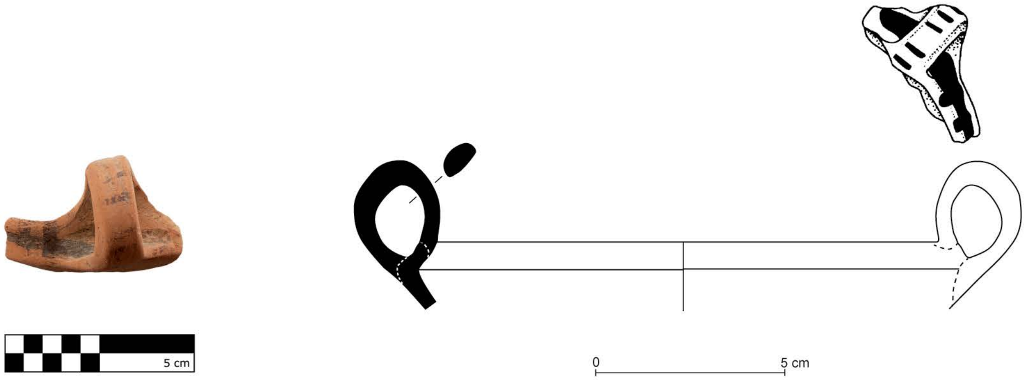

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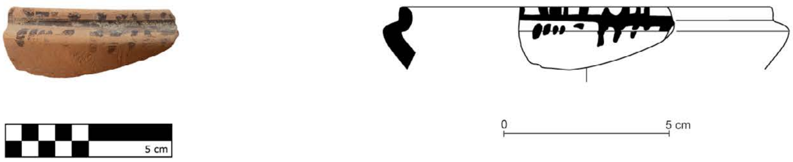
6

Figure 5: *Syro-Cilician Handmade Ware, Syro-Cilician Wheelmade Polished, Syro-Cilician Canonical Wares (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



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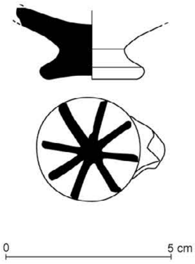

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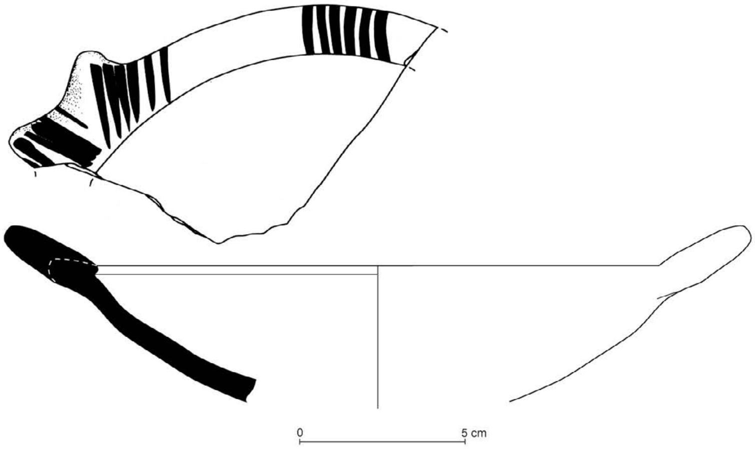
8



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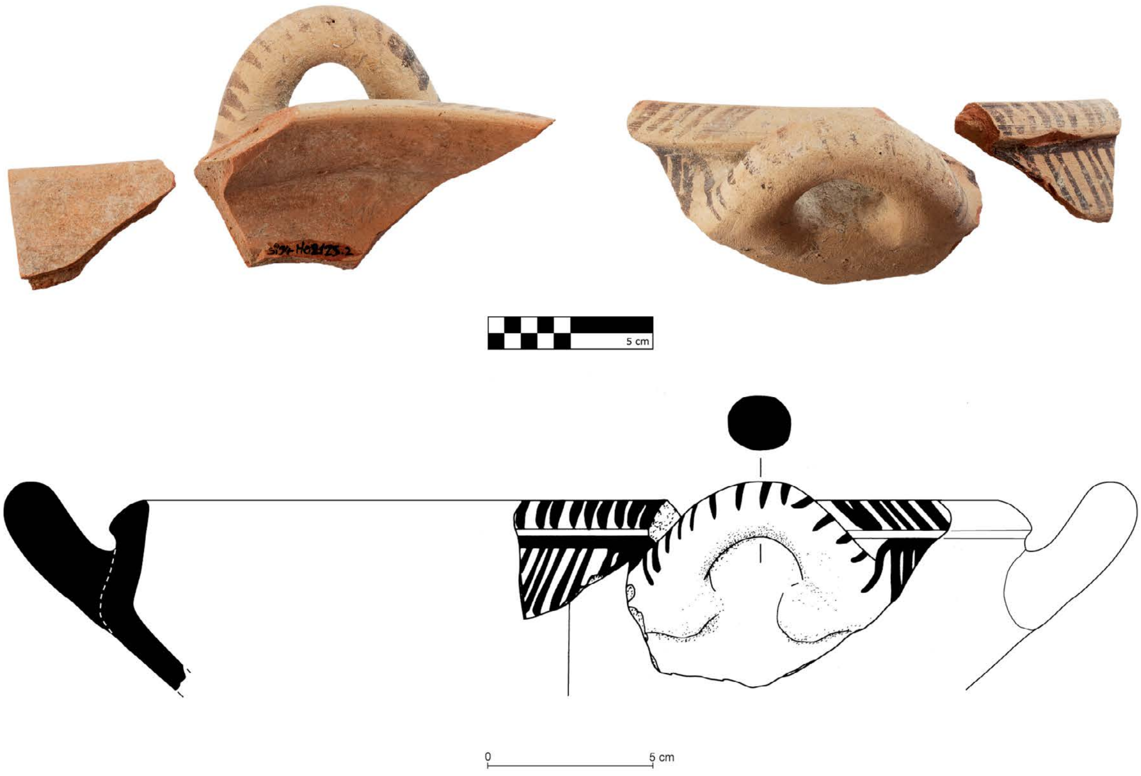
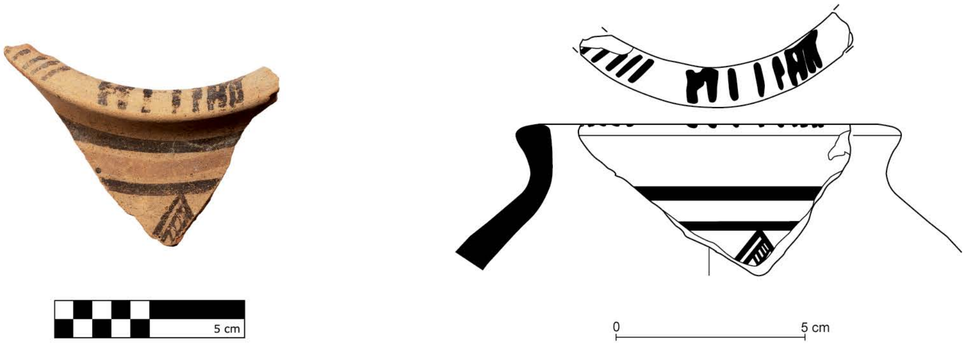
9


Si94-H0125.2
5 cm
0
5 cm

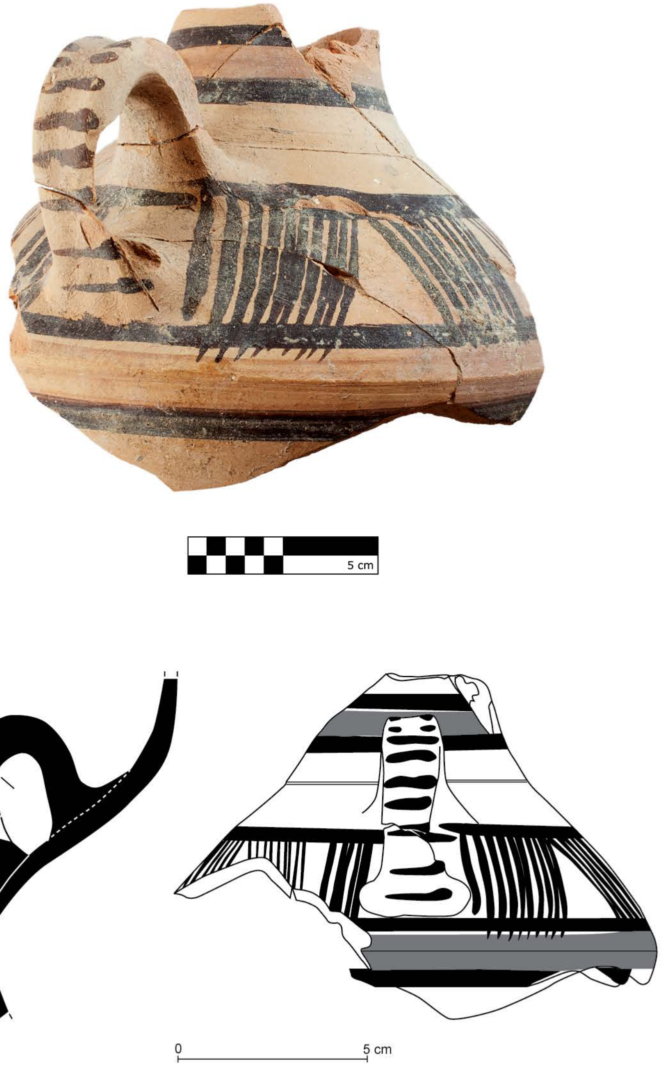
Si94-H0019.002
10

Figure 6: *Syro-Cilician Canonical Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



Si94-H0017.001

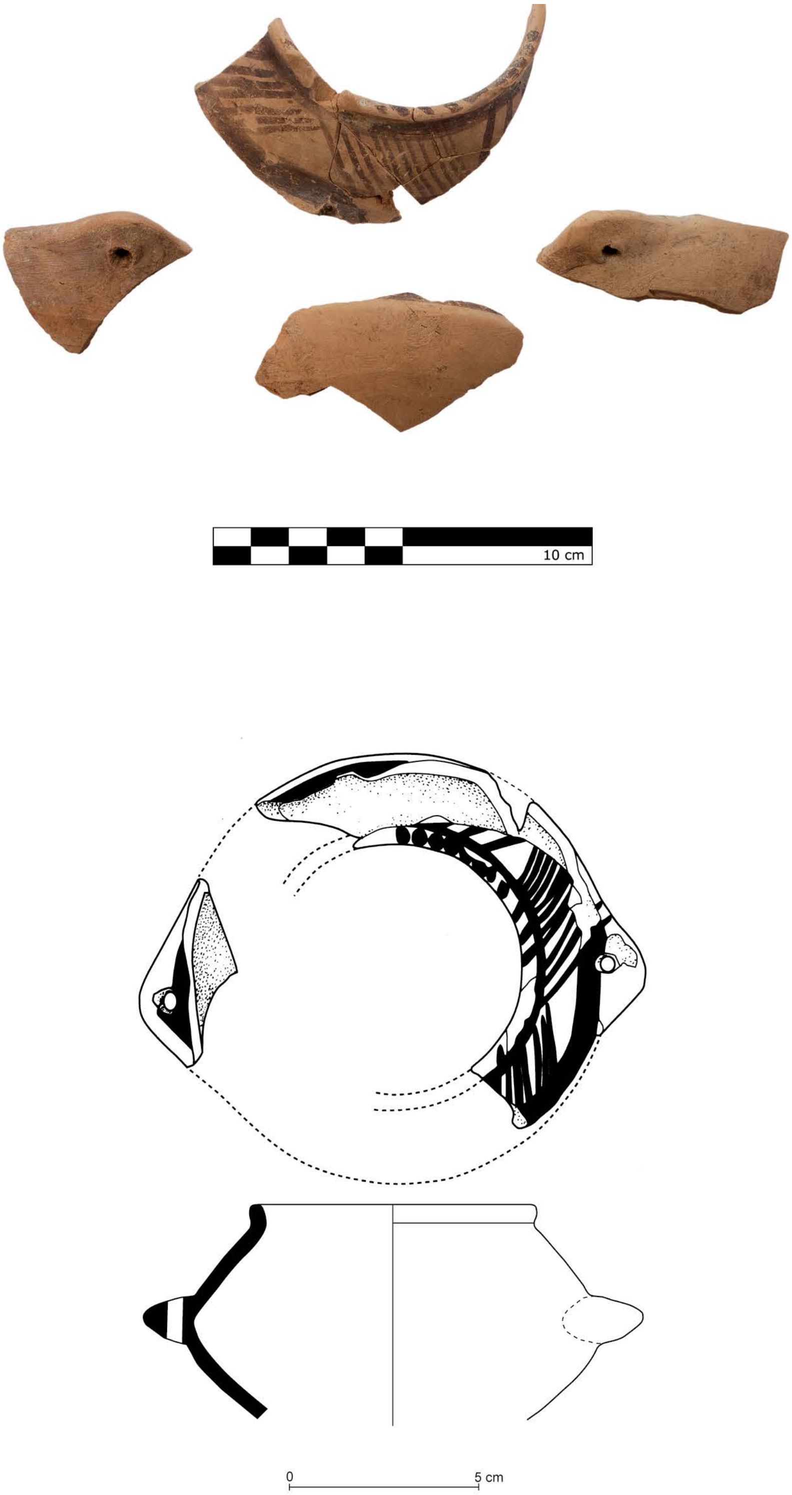
11



Si94-H0019.001

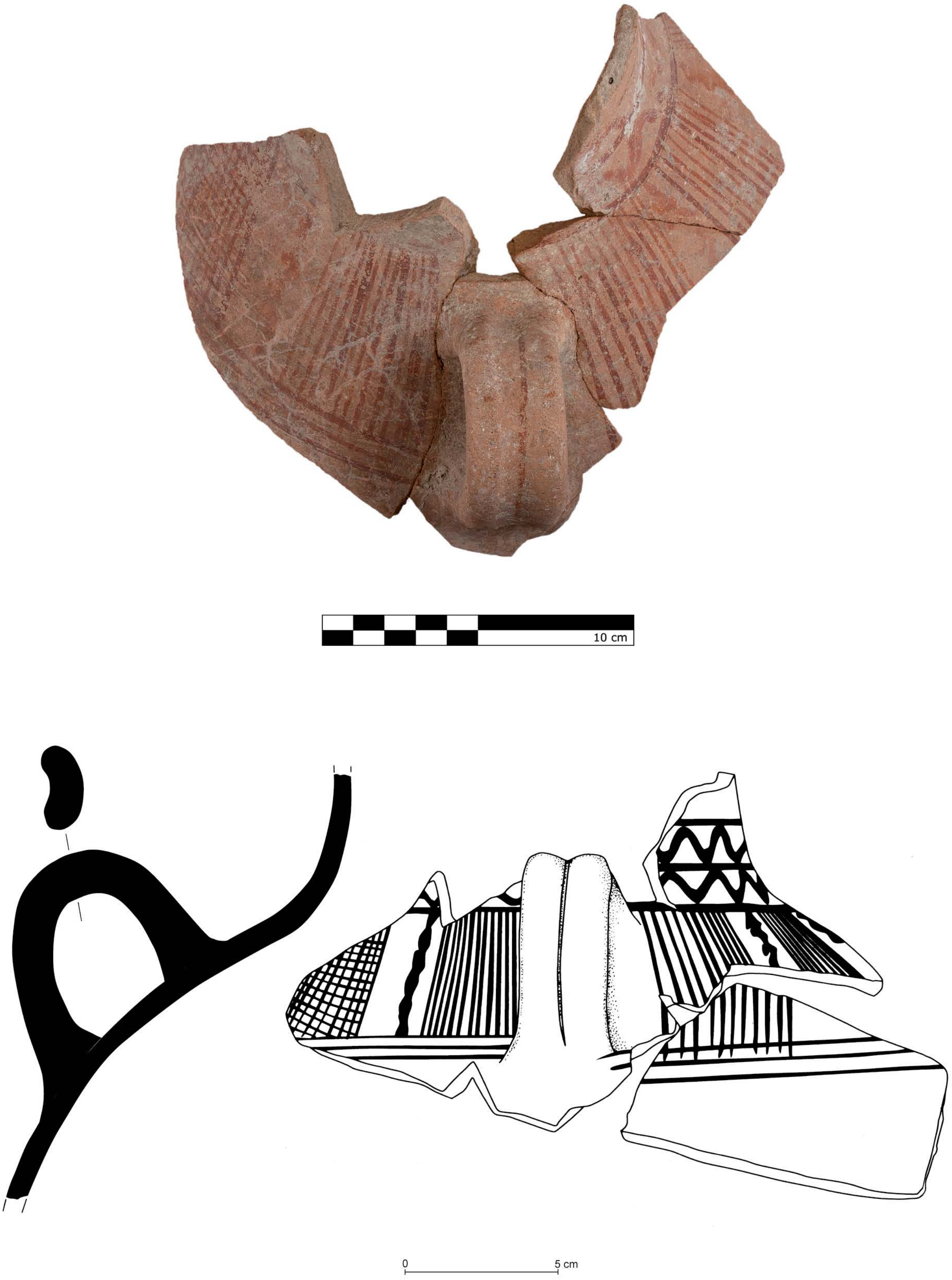
12

Figure 7: *Syro-Cilician Bichrome Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



Si94-H0021.002
13

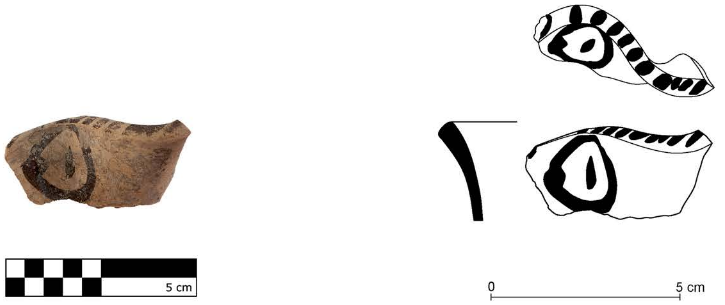
Figure 8: *Syro-Cilician Canonical Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



Si94-H0032.025

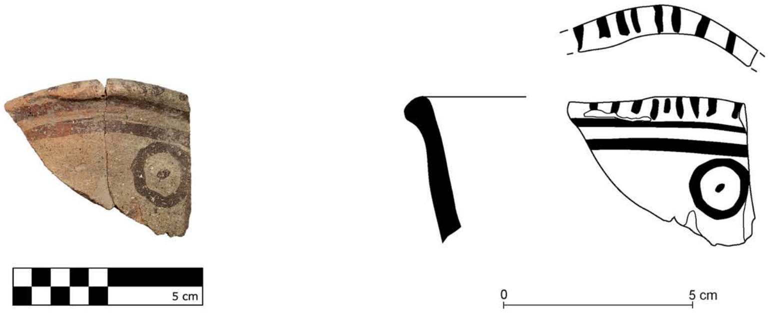
14

Figure 9: *Syro-Cilician Canonical Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



Si94-H0023.001

15



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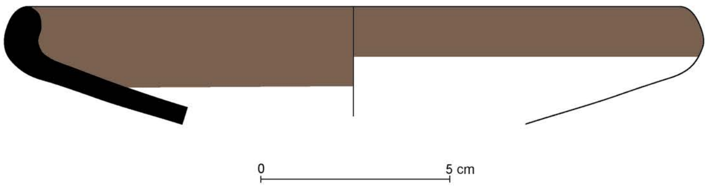
16



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17

Figure 10: *Syro-Cilician Canonical Ware, Red Slip Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*

Syro-Cilician Painted Wheelmade (Canonical, Bichrome, Polished) (Figures 9–10, Cat. 5–16)

Syro-Cilician Painted Wheelmade has distinct differences from the handmade version. First of all, the light brown clay is very different. The ware produced from this common clay is called Standard Ware at Sirkeli Höyük. It corresponds to the 'Light Clay Ware' of Gözlükule. This ware is always wheelmade. Bowls (S-curved, carinated, footed, shallow, deep), jars, and jugs are represented. There are three subtypes among the wheelmade category produced from the same clay, which are classified as 'canonical', 'bichrome painted', and 'polished'. In the canonical group (**Figure 5–6, 8–10, Cat. 6–10, 13–16**), the paint is directly applied onto the surface, where there is no slip. The paint is applied mainly in one color, which varies between brown, dark brown and blackish brown. Application of a second color is in light brown. The type with two paint colors is defined here as 'Bichrome Syro-Cilician Painted Wheelmade' (**Figure 7, Cat. 11–12**). The polished subgroup made of the same clay is differentiated from the canonical group by its light brown slipped and polished surface, on which the paint is applied (**Figure 5, Cat. 5**). Motifs are framed sets of diagonal or vertical lines, framed wavy lines, framed sets of cross-hatched triangles or filled triangles, dotted butterfly, hourglass, horizontal line with sets of vertical dashes, asterisk (under the foot), radials on rim and handle as well as herringbone on handles. Various motifs are also combined in one frame such as hatching, vertical wavy line, and sets of vertical lines.

Middle Bronze Age and Late Bronze Age I Contexts (Table 1)

Syro-Cilician Painted Ware has been found in all excavated Middle Bronze Age and Late Bronze Age I layers in all areas and also in all surveyed settlement areas both in old and current excavations at Sirkeli Höyük (**Figure 3**). In Garstang's excavations, his Trench E yielded one example associated with other Middle Bronze Age shapes.[35] These were recovered in a fill layer associated with a structure with stone foundations.[36] The excavations of Hrouda and Ehringhaus yielded various examples from Area 2, 3, 6.2, and 18.[37] The stratigraphy and contexts of Area 2, 3, and 6.2 have been re-examined by Sebastian von Peschke in his MA-thesis on the reassessment of the citadel excavations.[38] Therefore, examples are chosen here from these trenches. The phases attested in this article refer to the new phases assigned in this thesis. Area 2 consists of three adjacent trenches 2.0, 2.1, and 2.2, which have 8 phases (Phase 8–1). Phase 8 represents the bedrock.[39] Syro-Cilician Painted Ware is found in Phases 7–4. In Area 2/1, Syro-Cilician Painted Ware was discovered mainly in Phase 4 (**Figure 11**),[40] but also in earlier Phase 5.[41] In Area 2/0 the excavations reached lower levels than Area 2/1. Syro-Cilician Painted Ware is represented between the lowest Phase 7 on the bedrock and Phase 4.[42] Phase 7 is defined by a wall with a doorway belonging to a structure. Phase 6 is a fill layer above the Phase 7 structure. The pottery of Phases 5–4 comes from fill layers on the south side of stone wall SE15, which is referred to by Hrouda as a fortification wall belonging to the Iron Age that cuts into earlier levels.[43] Area 3 consists also of three adjacent trenches 3.0, 3.1, and 3.2, which yielded five phases. Middle Bronze Age Phases 5–3 were disturbed by Iron Age levels.[44]

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[35] Garstang 1938, Pl. 16, 2.

[36] Garstang 1938, Pl. 14.

[37] The pottery from Areas 2 and 3 has been studied in person by the author. The Middle Bronze Age pottery from Area 6/2 was studied only through color photos in the Sirkeli Höyük archive of Hrouda's excavations. The pottery from Area 18 could not be reached so far. Therefore, only published material from Area 18 could be considered here (See Ehringhaus *et al.* 1999, 128–129, Fig. 29).

[38] Von Peschke 2014; 2019b, 248–261.

[39] Hrouda *et al.* 1997, 93, 98, Fig. 1; von Peschke 2014, 6–39.

[40] Von Peschke 2014, 29–31. See Hrouda *et al.* 1997, 98, Fig. 6 for three published bowls of Syro-Cilician Painted Ware.

[41] Von Peschke 2014, 32–35.

[42] Von Peschke 2014, 19–23.

[43] Hrouda *et al.* 1997, 98 (Hrouda refers to this wall as *Burgmauer*); von Peschke 2014, 23, table 1; 35 table 2; 39 table 4.

[44] Hrouda *et al.* 1997, 105–106; von Peschke 2014, 40–54.

Period	Cultural Phases	Inner Citadel								Outer Citadel
		Sector D Phases	Area 6.2 Phases	Area 3 Phases			Area 2 Phases			Sector A Phases
				3.0	3.1	3.2	2.1	2.0	2.2	
MB I-II	OCI 1			5-4	4					15-12
	OCI 2			3	3			8-7		
	OCI 3						5-4	6-5		
	MCI 1	10	8							11
LBA I-II	MCI 2		7-6							10
	MCI 3	↑								
	MCI 4	11								

Table 1: *Chronological table showing phases of Sector A, Sector D, Area 6.2, Area 3, Area 2 on the Citadel (MB=Middle Bronze Age, LB=Late Bronze Age, IA=Iron Age, ECI=Early Cilician, OCI=Old Cilician, MCI=Middle Cilician, NCI=New Cilician, LCI=Late Cilician).*

Syro-Cilician pottery was found in Phases 5–2 together with Middle Bronze Age assemblages (**Figure 12–13**). In Area 6 two trenches, 6.1 and 6.2 were opened, which also had subdivisions in deeper levels. 6.2 yielded a handmade example of Syro-Cilician Ware in Phase 5 above a Late Bronze Age structure of Phases 6–8 (**Figure 14**).[45] In Area 18 the lowest level is represented by eight pits; pits and also walls are present in the overlying level. According to the pottery, Haider proposes a date in the Middle Bronze Age II for the lower level and Late Bronze Age I for the upper level. Three vessels of Syro-Cilician Ware were published with illustrations. The first was recovered from one of the pits in the lower Middle Bronze Age II level and belongs to a jug. The second and third fragments were found in a Late Bronze Age I level, which belong to a jug and a jar. Motifs on the shoulders comprise framed hatched and filled triangles as well as a framed wavy line and sets of diagonal lines.[46]

In Sector A on the outer citadel, a Middle Bronze Age II-Late Bronze Age I level has been discovered in the step trench opened on the northern slope adjacent to the horizontal trenches of Sector A. Building A1, of which the oldest phase dates to the Late Bronze Age, was discovered on the outer citadel (Level A 9).[47]

The Middle Bronze Age-Late Bronze Age I layers (Level A10-12) under Building A1 were recovered in the step trench immediately at the northern steep slope of the mound and were partially disturbed by Iron Age occupation and erosion.[48] Syro-Cilician Painted Ware bowls and trefoil mouth jugs came to light here.[49] Similarly, the Sector D surface scraping was conducted adjacent to the Sector D horizontal trenches on the southwestern slope of the mound.[50]

The pottery collections yielded a chronological pattern changing from Iron Age to Middle Bronze Age following the downwards slope of the mound. Bowls, jars, and trefoil jugs of Syro-Cilician Ware are represented in these collections. Besides Sectors A and D, Syro-Cilician Ware has also been found in

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[45] Hrouda *et al.* 1997, 100, Fig. 8–9; von Peschke 2014, 72–90, table 15.
[46] Ehringhaus *et al.* 1999, 128–129, Fig. 29.
[47] Ahrens *et al.* 2019, 147–166.
[48] Kozal and Kulemann-Ossen 2019, 210–234.
[49] Novák and Kozal 2013, 413–414, Fig. 8.
[50] Von Peschke 2019a.

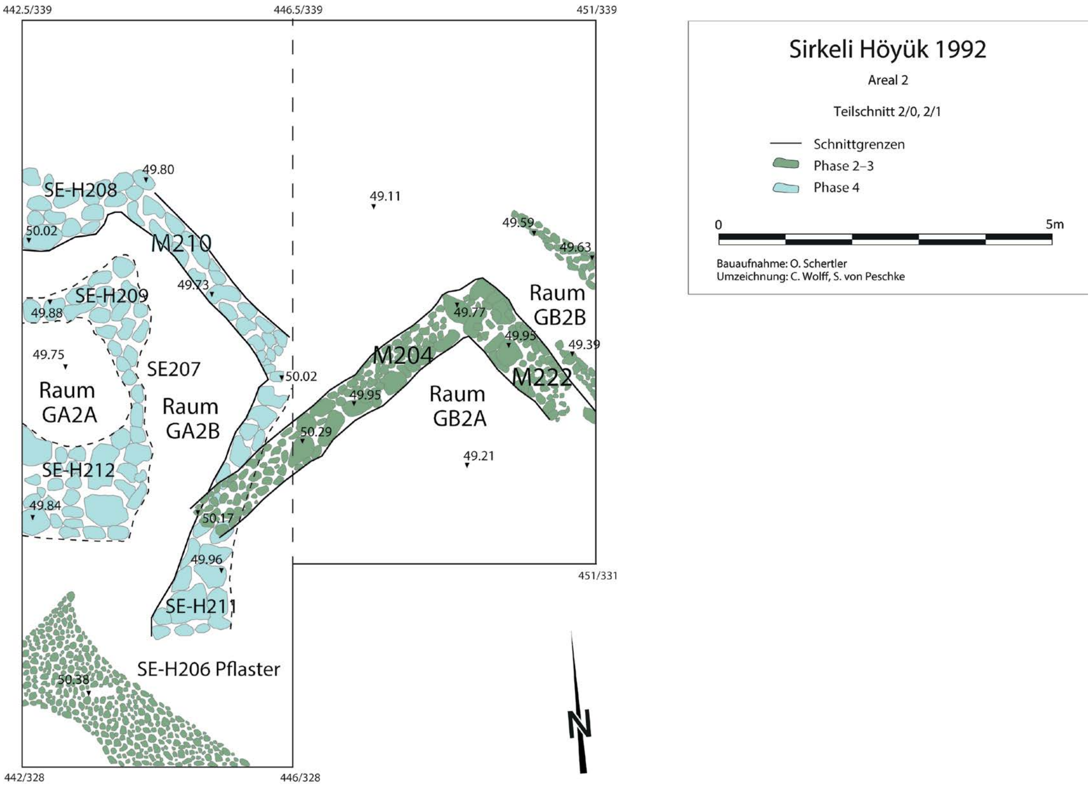
442.5/339
446.5/339
451/339
Sirkeli Höyük 1992
Areal 2
Teilschnitt 2/0, 2/1
Schnittgrenzen
Phase 2–3
Phase 4
0
5m
Bauaufnahme: O. Schertler
Umzeichnung: C. Wolff, S. von Peschke
SE-H208
49.80
50.02
M210
49.11
49.59
49.63
SE-H209
49.73
49.88
Raum GB2B
49.77
49.95
49.39
49.75
SE207
50.02
M204
M222
Raum GA2A
Raum GA2B
49.95
Raum GB2A
50.29
SE-H212
49.21
49.84
50.17
49.96
SE-H211
451/331
SE-H206 Pflaster
50.38
N
442/328
446/328

Figure 11: *Area 2, Phase 4–2 (plan reproduced by S. von Peschke, Sirkeli Höyük Project).*

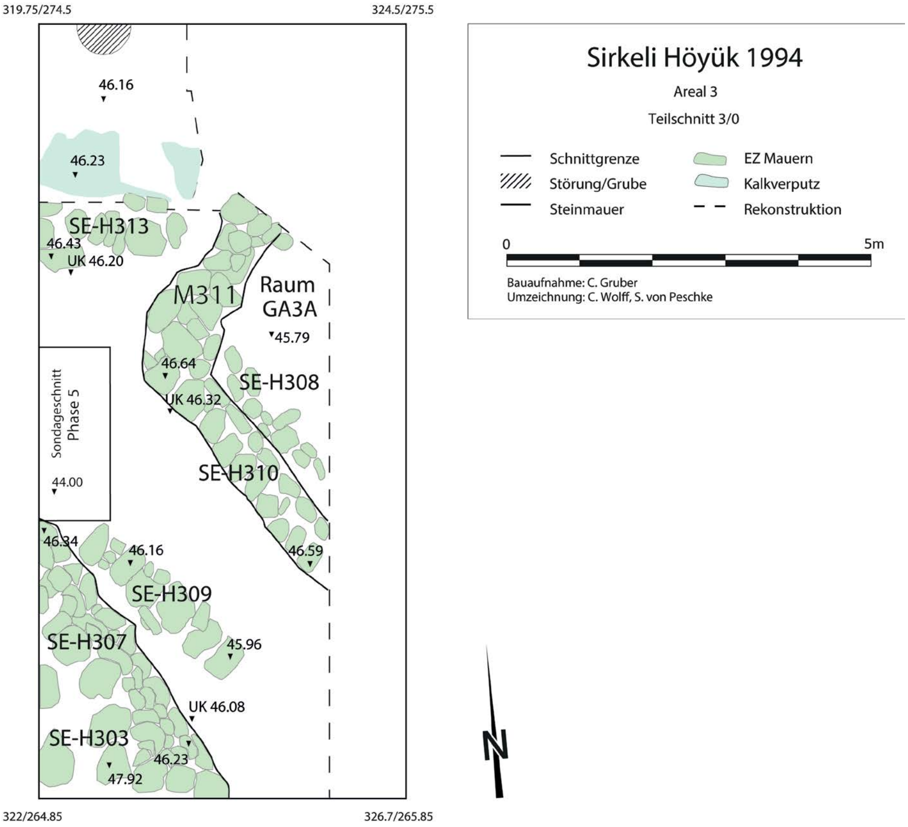
319.75/274.5
324.5/275.5
Sirkeli Höyük 1994
Areal 3
Teilschnitt 3/0
Schnittgrenze
Störung/Grube
Steinmauer
EZ Mauern
Kalkverputz
Rekonstruktion
0
5m
Bauaufnahme: C. Gruber
Umzeichnung: C. Wolff, S. von Peschke
46.16
46.23
SE-H313
46.43
UK 46.20
M311
Raum GA3A
45.79
46.64
SE-H308
UK 46.32
Sondageschnitt Phase 5
44.00
SE-H310
46.59
46.34
46.16
SE-H309
SE-H307
45.96
UK 46.08
SE-H303
46.23
47.92
N
322/264.85
326.7/265.85

Figure 12: *Area 3, Phase 5–4 (plan reproduced by S. von Peschke, Sirkeli Höyük Project)*

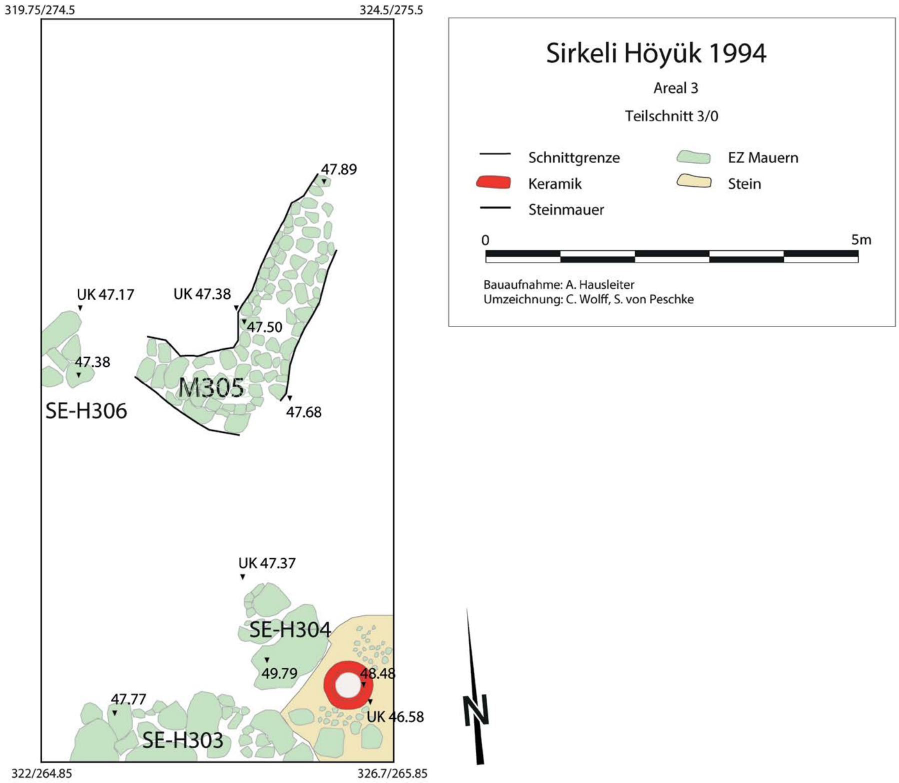
319.75/274.5
324.5/275.5
47.89
UK 47.17
UK 47.38
47.50
47.38
M305
SE-H306
47.68
UK 47.37
SE-H304
49.79
48.48
47.77
UK 46.58
SE-H303
322/264.85
326.7/265.85
N
Sirkeli Höyük 1994
Areal 3
Teilschnitt 3/0
Schnittgrenze
Keramik
Steinmauer
EZ Mauern
Stein
0
5m
Bauaufnahme: A. Hausleiter
Umzeichnung: C. Wolff, S. von Peschke

Figure 13: *Area 3, Phase 3 (plan reproduced by S. von Peschke, Sirkeli Höyük Project).*

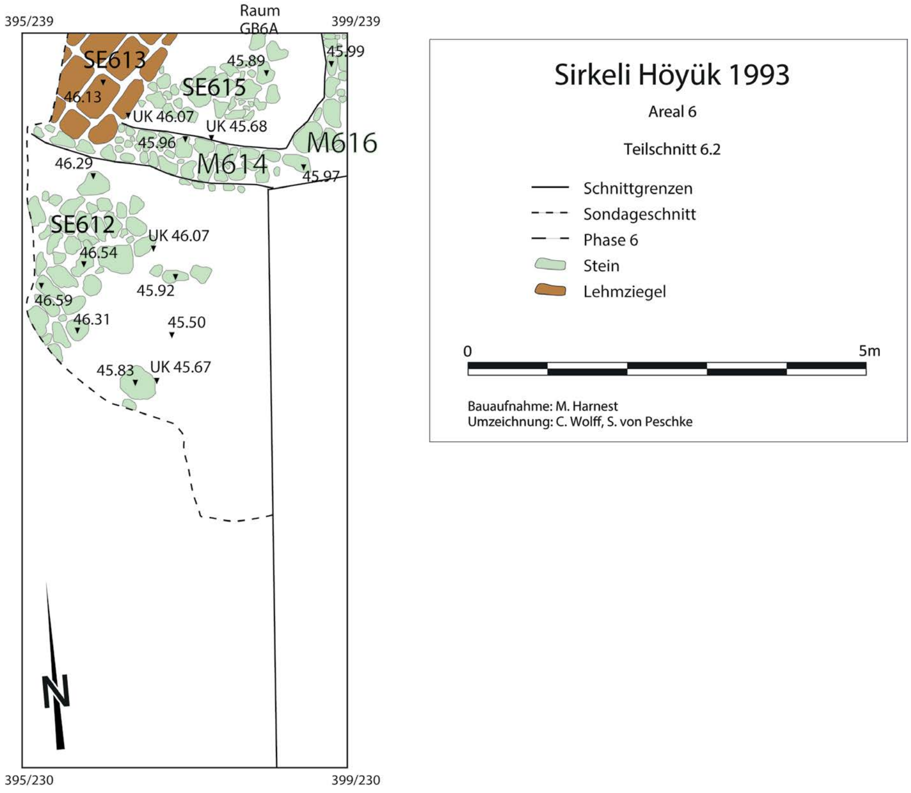
395/239
Raum GB6A
399/239
SE613
45.89
45.99
46.13
SE615
UK 46.07
UK 45.68
45.96
M616
46.29
M614
45.97
SE612
UK 46.07
46.54
45.92
46.59
46.31
45.50
45.83
UK 45.67
N
395/230
399/230
Sirkeli Höyük 1993
Areal 6
Teilschnitt 6.2
Schnittgrenzen
Sondageschnitt
Phase 6
Stein
Lehmziegel
0
5m
Bauaufnahme: M. Harnest
Umzeichnung: C. Wolff, S. von Peschke

Figure 14: *Area 6.2, Phase 5 (plan reproduced by S. von Peschke, Sirkeli Höyük Project).*

the settlement areas north of the Ceyhan river as well as in the levels under the Iron Age occupation in Sector F in the southeastern lower town.

Late Bronze Age Painted Wares

Painted Wares of the Late Bronze Age at Sirkeli Höyük can be grouped into three categories. Red-slipped, Red-edged, and Banded decoration can be considered as one ware group due to their interrelated typological features. Monochrome or Bichrome Painted Wavy-line Ware and Cross-Hatched Ware are classified as second and third ware groups as they show distinct characteristics.

Red-slipped, Red-edged, and Banded Decorations (Figures 10, 15, Cat. 17–22)

Red-slipped, Red-edged, and Banded Wares show different applications of red, brown, or red-brown on the inner and outer surfaces, however, the fabric of all three wares is macroscopically the same. They are produced from the same clay as Plain Ware. Moreover, the style of the painting among the three groups is related to each other so that the differences should be defined as variations in surface treatment rather than as wares. Therefore, they are grouped here as one ware category with three different surface decorations. Red-slipped 'ware' indicates that the slip was applied to a large area on the interior of the vessel and a band on and under the rim on the exterior (**Figure 10, 15, Cat. 17–19**). In the Gözlükule publication, Goldman refers to this ware as 'Monochrome Burnished Ware' of Late Bronze Age I. She describes the slip as thin and wash-like besides being partial. She refers to partial slipping as a characteristic of Hittite pottery.[51] In Tepebağ, this ware is called 'Red Band Decorated Pottery'.[52] Partial slipping in red, brown, and red-brown colors is a common feature in pottery from Kültepe in the Old Assyrian Period.[53] It is also known in Jazirah in the Late Bronze Age (common in Middle Jazirah IB, ca. 1400/1350–1270 BC), which is defined as Red-slipped Ware by Peter Pfälzner.[54] How this style from the previous Old Assyrian Period and contemporary periods in other cultural regions came to be a common style is a subject that deserves further research. Another related surface painting type, which is identified through the red band both on the interior and the exterior of the rim (**Figure 15, Cat. 20–21**), is called a 'Bowl with Painted Rim Band' in Gözlükule by Goldman and 'Red-Edged Ware' in the Jazirah region in Middle Jazirah IB) by Pfälzner.[55] Like 'Monochrome Burnished Ware', Goldman considers this ware as a successor of the Middle Bronze Age that continued into the Late Bronze Age I.[56] Banded decoration occurs at Sirkeli Höyük very rarely and is restricted only to one bowl (**Figure 15, Cat. 22**) and one plate. The bowl has a carinated body and is decorated with red-brown and brown bands on the exterior. In contrast, the plate is decorated with red bands only inside, whereas there is a pre-incised pot mark applied on the exterior surface.[57] Red banded plates are not common in Cilicia, however, they are well known in Alalakh in the Late Bronze Age.[58]

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[51] Goldman 1956, 184.

[52] Yaşin and Aksoy in this volume.

[53] Kulakoğlu and Kangal 2008, 178, 195, 217, cat. nos. 11, 61, 62, 121.

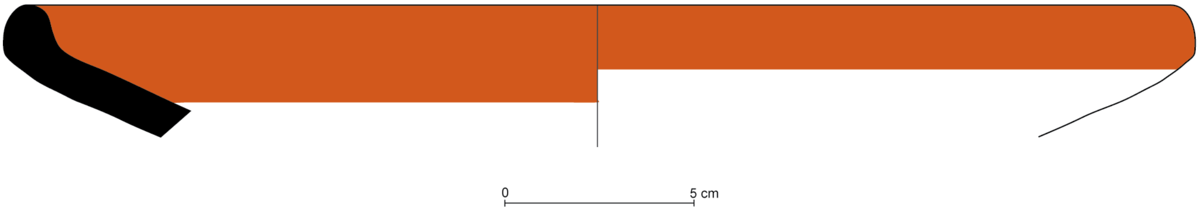
[54] Pfälzner 2007, 247–248.

[55] For the 'Bowl with Painted Rim Band' see Goldman 1956, 184. For the 'Red-Edged Ware' see Pfälzner 2007, 246–247.

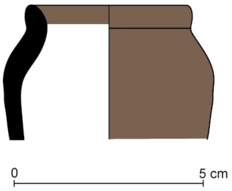
[56] Goldman 1956, 184.

[57] Kozal 2013, 218, Fig. 2.12.

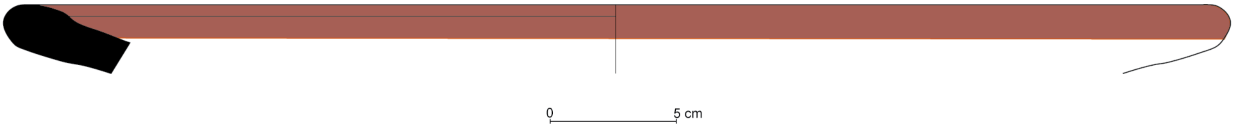
[58] Mullins 2010, Fig. 3.3–1; Woolley 1955, Pl. 88e, ATP/38/43.



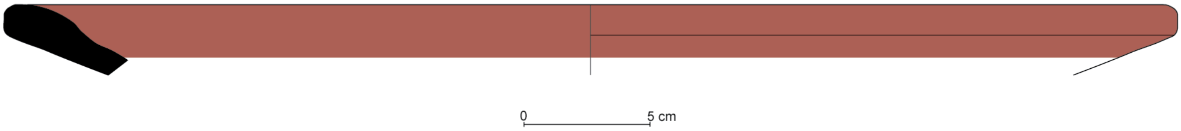
Si13-D0176.060
18



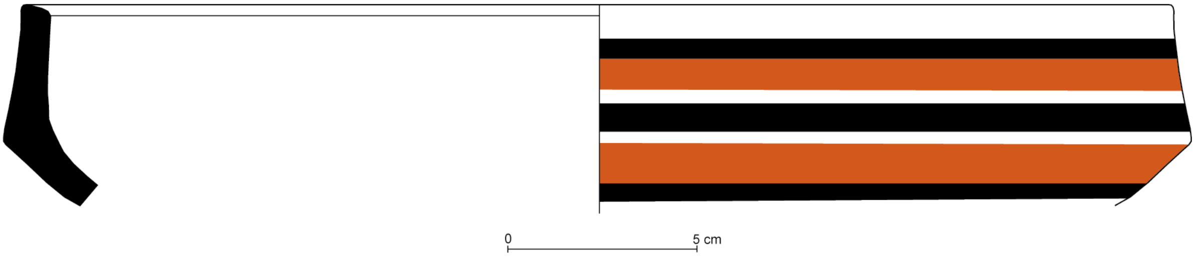
Si13-D0176.026
19



Si94-H0003.008
20

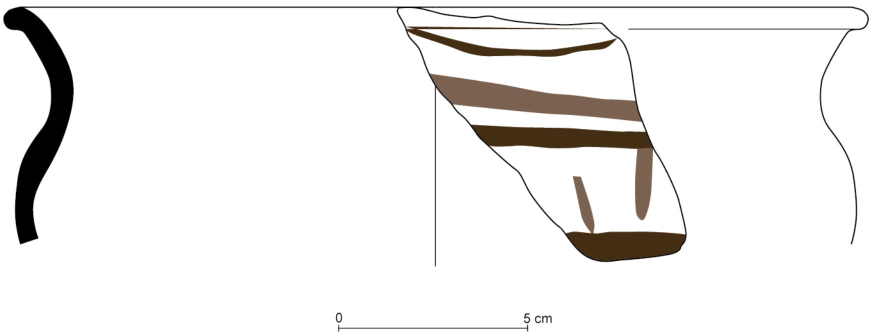


Si94-H0003.005
21

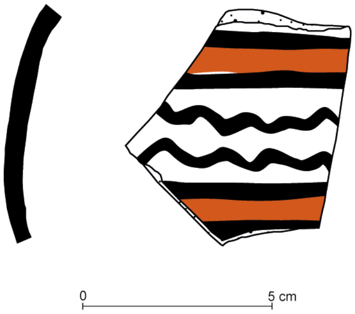


Si94-H0005.003
22

Figure 15: *Red Slip Ware, Red-edged, Banded decorations (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*



Si18-D0183.005
23



Si12-D0170.017
24

Figure 16: *Monochrome or Bichrome Painted Wavy-line Ware (illustration by Gabriele Elsen-Novák, photo by L. Simons, Sirkeli Höyük Project).*

Monochrome or Bichrome Painted Wavy-line Ware (Figure 16, Cat. 23–24)

The term Monochrome or Bichrome Painted Wavy-line Ware was introduced by Goldman as this decoration type was discovered first in Gözlükule dating to Late Bronze Age I. Goldman describes the fabric as having clay of medium levigation with mineral inclusions in reddish buff. The surface is either wet-smoothed, self-slipped or has a cream or light brown slip. The paint is applied either in one or two colors. The motifs are horizontal and wavy lines as well as rim dashes, linear or solid triangles occur. In Gözlükule this decoration is so far restricted to jars, kraters and pitchers.[59] This type of decoration is also represented in Sirkeli Höyük, but in contrast to Gözlükule, it is found in both Late Bronze Age I and II layers. However, it should be stated here that the stratigraphical and pottery studies in Sirkeli Höyük are still ongoing and therefore, the first appearance of this ware, whether in Middle Bronze Age II or Late Bronze Age I cannot yet be determined with certainty. Besides an upper part of a jar, this type of decoration was found mainly on body sherds of closed vessels, and therefore there is little information on the forms. Nevertheless, it should be noted here that this decoration was mainly applied on closed vessels. The fabric corresponds to that of Standard Medium Ware, which is a light brown fabric with medium mineral inclusions. The surface is treated the same as Gözlükule's vessels. The paint is either monochrome or bichrome in black, red, brown or light brown. The motifs include horizontal lines, bands, wavy lines, zigzags, and dashes. The main feature of the motifs is that they are irregular and carelessly made. For instance, the motifs are usually not parallel to each other.

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[59] Goldman 1956, 185, 199.

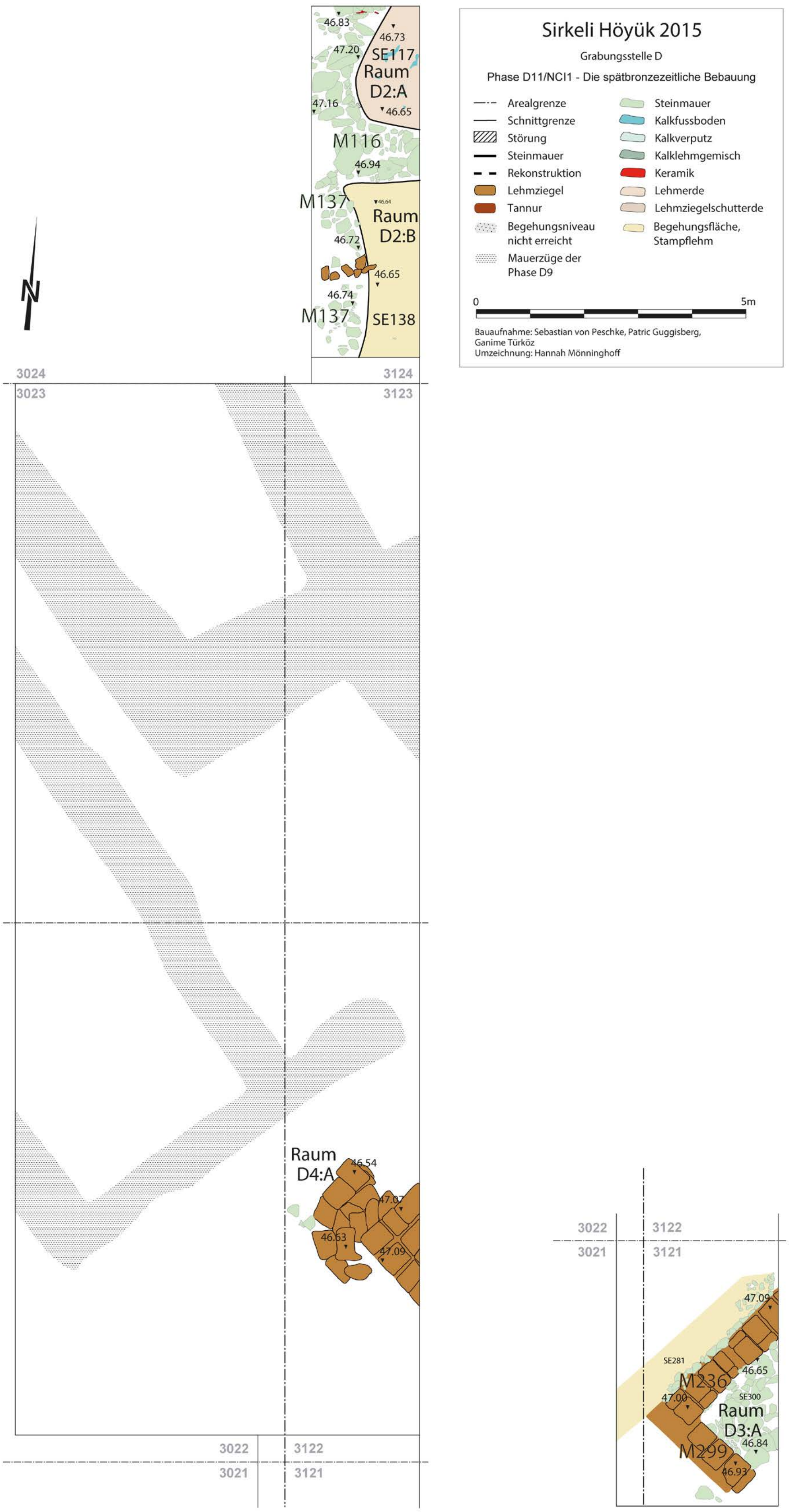
Sirkeli Höyük 2015
Grabungsstelle D
Phase D11/NCI1 - Die spätbronzezeitliche Bebauung
Arealgrenze
Schnittgrenze
Störung
Steinmauer
Rekonstruktion
Lehmziegel
Tannur
Begehungsniveau nicht erreicht
Mauerzüge der Phase D9
Steinmauer
Kalkfussboden
Kalkverputz
Kalklehmgemisch
Keramik
Lehmerde
Lehmziegelschutterde
Begehungsfläche, Stampflehm
0
5m
Bauaufnahme: Sebastian von Peschke, Patric Guggisberg, Ganime Türköz
Umzeichnung: Hannah Mönninghoff
N
SE117
Raum D2:A
M116
M137
Raum D2:B
M137
SE138
46.83
46.73
47.20
47.16
46.65
46.94
46.72
46.65
46.74
3024
3023
3124
3123
Raum D4:A
46.54
47.07
46.63
47.09
3022
3021
3122
3121
3022
3122
3021
3121
47.09
SE281
46.65
M236
47.00
SE300
Raum D3:A
46.84
M299
46.93

Figure 17: *Sector D, Phase 11 (plan by H. Mönninghof, Sirkeli Höyük Project).*

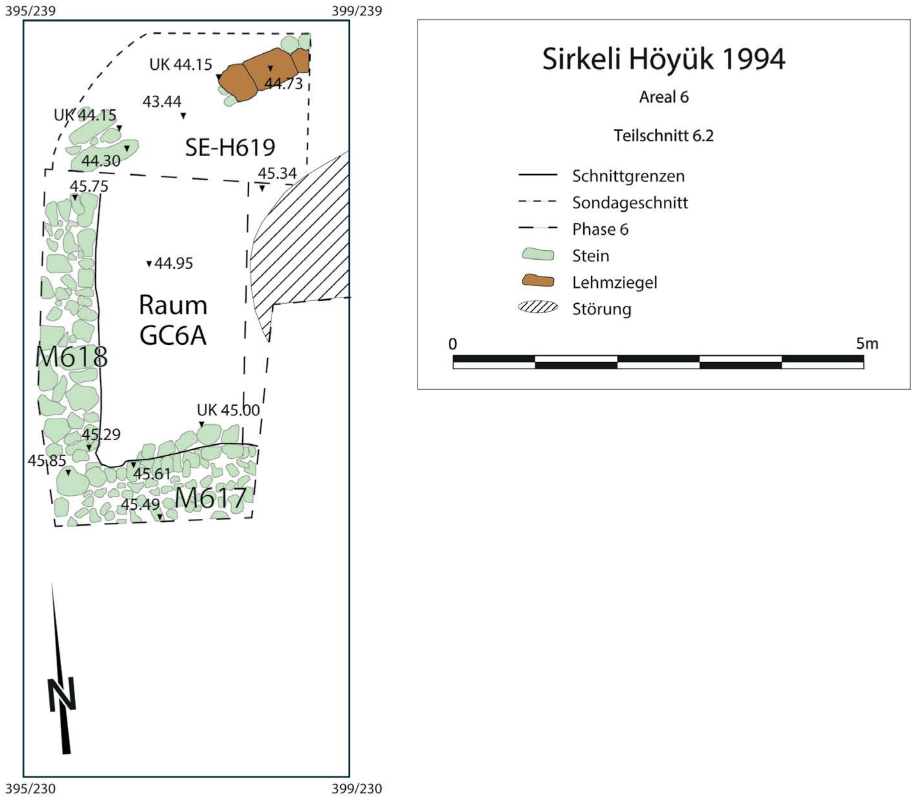
395/239
399/239
UK 44.15
44.73
43.44
UK 44.15
SE-H619
44.30
45.34
45.75
44.95
Raum
GC6A
M618
UK 45.00
45.29
45.85
45.61
45.49
M617
N
395/230
399/230
Sirkeli Höyük 1994
Areal 6
Teilschnitt 6.2
Schnittgrenzen
Sondageschnitt
Phase 6
Stein
Lehmziegel
Störung
0
5m

Figure 18: *Area 6.2, Phase 8–6 (plan reproduced by S. von Peschke, Sirkeli Höyük Project).*

Cross-hatched Ware

Cross-hatching is a commonly used motif either as a single or in combination with others. Cross-hatched Ware is a distinctive type of pottery defined mainly by bowls and square-rim jars/basins with painted cross-hatched decoration on the upper body. This type of decoration is common and local in Kilise Tepe in Rough Cilicia, which is most probably the origin of the ware.[60] This ware also appears at sites in western Plain Cilicia (Soli, Yumuktepe and Gözlükule), which are close to Rough Cilicia.[61] The ware is dated to the end of the Late Bronze Age and the beginning of the Iron Age. In Sirkeli Höyük there are a few body fragments with cross-hatched decoration, but since the rims are not preserved, they cannot be attributed to Cross-Hatched Ware with certainty although they are likely to be from this type.[62]

Late Bronze Age Contexts (Figure 3, Table 1)

The Late Bronze Age contexts come from two excavated areas on the citadel. These are Sector D, which is still being excavated, and Area 6.2 excavated by Hrouda. Research in Sector D includes an excavated area and a systematic survey scraping on the slope. In the excavated trenches of Sector D, Late Bronze Age materials were found in Building D2, which dates to the Late Bronze Age, and the Late Bronze Age layers (Phase D11 and D10) under Iron Age Building D1 (**Figure 17**). The pottery presented in this article comes from the layers under Building D1 and from the open spaces around it. D1 is a large building with stone foundations that extend beyond the excavated area. Some rooms are fully excavated to the earliest levels of the building. A deposit under room D1:B yielded a Late Bronze-Iron Age transitional deposit, which was found on a floor surface.[63] Hrouda's excavations on the citadel in Area 6.2 (re-named as Sector H in the current excavations) have uncovered another large building that is also partially excavated (**Figure 18**). Three architectural phases have been identified (Phase 8, 7 and 6), from which the pottery dates to the Late Bronze Age.[64]

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[60] Hansen and Postgate 2007, Fig. 396, 751–757, Fig. 398, 788–792.

[61] See the contribution presented by Jean in this volume.

[62] Novák and Kozal 2013, 416, Fig. 11.

Summary

The excavations at Sirkeli Höyük, as well as studies on stratigraphy, chronology and pottery are still ongoing, therefore, only preliminary results can be presented here. It should also be noted that the current lack of a thoroughly excavated sequence at Sirkeli Höyük throughout the 2nd Millennium BC makes it difficult to determine the first appearances of the wares and typological variations occurring through time. However, the presence of Middle and Late Bronze Age contexts provides evidence on pottery assemblages. Middle Bronze Age painted pottery is represented by the Syro-Cilician painted style, which can be divided into handmade and wheelmade with further subgroups. The handmade type is produced from red gritty fabric, whereas the wheelmade type is from the standard ware fabric. Syro-Cilician painted style continued into the Late Bronze Age I period and was gradually replaced by the painted decorations of the Late Bronze Age, which are Red Slip/Red-Edged/Red Banded, Monochrome or Bichrome Painted Wavy-line Ware, and Cross-hatched Ware.

One aim of further research is to explore whether the Late Bronze Age painted decorations could have appeared already at the end of the Middle Bronze Age. Another important aspect of further research is to examine the interregional connections through the appearance of not only common decorative styles, but also common pottery types over large areas. Painted styles generally comprised only a small part of the pottery assemblages; the main bulk of the pottery comprises undecorated types. Painted decorative styles are directly linked with the undecorated wares as they were produced from the same clay. Therefore, further studies on painted decorations will be conducted with the complete assemblage in order to obtain more accurate data.

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[63] Von Peschke 2019a, 291–305.

[64] Von Peschke 2019b, 248–261.

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Catalogue

Cat. No. 1 (Figure 4):	Si93/40 (Hrouda *et al.* 1997, 99, Fig. 9), Area 6/2, Phase 5 (Old Hrouda Phase 3-4), Residual in Iron Age structure (Gebäude 6, Raum A = GB6A).Syro-Cilician Handmade Ware, trefoil mouth jug, red-brown fabric with gray core, rare fine white and black grits, cream slip, red-brown paint.
Cat. No. 2 (Figure 4):	Si94-H0026.001, Old number Si94-H3204.1, Area 3/2, Phase 2, Loc. 4 (fill layer). Syro-Cilician Handmade Ware, trefoil mouth jug, red-brown fabric (2.5YR 6/6) with gray core, rare fine white grits, cream slip, red-brown paint.
Cat. No. 3 (Figure 4):	Si16-D0121.001, Sector D, Systematic surface scraping on the SW-slope. Syro-Cilician Handmade Ware, trefoil mouth jug, red-brown fabric (2.5 YR 5/6) with gray core, rare fine white and black grits, cream slip, red-brown paint.
Cat. No. 4 (Figure 5):	Si94-H0021.001, Old number Si94-H2129.1, Area 2/1, Phase 4, Loc.29 F. Nr.32 (South fill related to the lowest layer of wall SE 15). Syro-Cilician Handmade Ware, closed vessel, red-brown fabric (2.5 YR 5/6) with gray core, rare medium white grits, cream slip, red-brown paint.
Cat. No. 5 (Figure 5):	Si09-A0038.056, Sector A, Phase A15-11, Fill layer under Late Bronze Age collapse.Syro-Cilician Polished Ware, S-curved bowl, red-brown fabric (5YR 5/6) rare fine white and black grits, brown slip, polish, dark brown paint.
Cat. No. 6 (Figure 5):	Si94-H0017.003, Old numberSi94-H2113.3, Area 2/1, Phase 4, Loc. 13, Fund Nr. 16 (South fill related to wall SE 15). Syro-Cilician Canonical Ware, carinated bowl, light brown fabric (7.5YR 7/4), rare fine white grits, smoothed, dark brown paint.
Cat. No. 7 (Figure 6):	Si94-H022.002, Old number Si94-H2139.2, Area 2/1, Phase 4, Loc. 39, Fund Nr. 42 (South fill related to wall SE 15). Syro-Cilician Canonical Ware, carinated bowl, light brown fabric (7.5YR 7/4), without inclusions, smoothed, dark brown.
Cat. No. 8 (Figure 6):	Si16-D0121.004, Sector D, Systematic surface scraping on the SW-slope. Syro-Cilician Canonical Ware, footed bowl, light brown fabric (10YR 6/4), rare fine white and black grit, self slip, dark brown paint.
Cat. No. 9 (Figure 6):	Si94-H0022.009, Area 2/1, Phase 4, Loc. 39, Fundnr. 42 (South fill related to wall SE 15) . Syro-Cilician Canonical Ware, shallow bowl, light brown fabric (10YR 6/4), rare fine white and black grits, self slip, dark brown paint.
Cat. No. 10 (Figure 6):	Si94-H0019.002, Old number Si94-H2125.2, Area 2/1, Phase 4, Loc. 25 (South fill related to the lowest layer of wall SE 15). Syro-Cilician Canonical Ware, deep bowl, light brown fabric (10YR 6/4), rare white grits, self slip, dark brown paint.

Cat. No. 11 (Figure 7):	Si94-H0017.001, Old number Si94-H2113.1, Area 2/1, Phase 4, Loc. 13, Fund Nr. 16 (South fill related to wall SE 15). Syro-Cilician Bichrome Ware, jar, light brown fabric (7.5YR 7/4), rare white grits, self slip, dark brown, light brown paint.
Cat. No. 12 (Figure 7):	Si94-H0019.001, Old number Si94-H2125.1, Area 2/1, Phase 4, Loc. 25 (South fill layer related to wall SE 15). Syro-Cilician Bichrome Ware, jar, light brown fabric (7.5YR 6/4), rare white grits, self slip, dark brown, light brown paint.
Cat. No. 13 (Figure 8):	Si94-H0021.002, Old number Si94-H2129.2, Area 2/1, Phase 4, Loc. 29 F. Nr.32 (South fill related to the lowest layer of wall SE 15). Syro-Cilician Canonical Ware, jar, light brown fabric (7.5YR 7/4), rare black grits, self slip, dark brown paint.
Cat. No. 14 (Figure 9):	Si94-H0032.025, Area 2/0, Phase 7, Loc. 5, Fund Nr. 7 (fill layer related to wall SE-17 and doorway SE-18. Syro-Cilician Canonical Ware, Jar, light brown fabric (7.5YR 6/4), rare black, red inclusions, silver mica, self slip, red-brown paint.
Cat. No. 15 (Figure 10):	Si94-H0023.001, Old number Si94.H2141.1, Area 2/1, Phase 5, Loc. 41, Fund Nr. 44 (South fill in trench). Syro-Cilician Canonical Ware, jug, light brown fabric (7.5YR 8/4), without inclusions, self slip, dark brown paint.
Cat. No. 16 (Figure 10):	Si16-D0123.006-7, Sector D, surface, systematic surface scraping on the SW-slope.Syro-Cilician Canonical Ware, jug, light brown fabric (2.5YR 6/3), rare fine white and black grits, self slip, dark brown paint.
Cat. No. 17 (Figure 10):	Si13-D0185.005, Sector D, Phase D11, Deposit on surface, Building D1, room B. Red Slip Decoration, bowl, red-brown fabric (7.5YR 4/4) with black core, frequent fine white, black and red grits, brown slip/paint.
Cat. No. 18 (Figure 15):	Si13-D0176.060, Sector D, Phase D11, Deposit on surface, Building D1, room B. Red Slip Decoration, bowl, brown fabric (7.5YR 5/4) with black core, frequent fine white and black grits, red slip/paint.
Cat. No. 19 (Figure 15):	Si13-D0176.026, Sector D, Phase D11, Deposit on surface, Building D1, room B. Red Slip Decoration, cup, red-brown fabric (7.5YR 4/4), frequent fine white and black grits, rare red grits, red slip/paint.
Cat. No. 20 (Figure 15):	Si94-H0003.008, Area 6.2, Phase 8/7, Late Bronze Age Building in Area 6.2. Red-edged Decoration, plate, brown fabric (7.5YR 5/3) and red-brown (5YR 5/6) with black core, frequent fine white and black grits, red-brown slip/paint.
Cat. No. 21 (Figure 15):	Si94-H0003.005, Area 6.2, Phase 8/7, Late Bronze Age Building in Area 6.2. Red-edged Decoration, plate, brown fabric (7.5YR 5/3) and red-brown (5YR 5/6) with black core, frequent fine white and black grits, red-brown slip/paint.
Cat. No. 22 (Figure 15):	Si94-H0005.003, Area 6.2, Phase 8/7, LBA Building in Area 6.2. Banded Decoration, bowl, light brown fabric (7.5YR 5/3), frequent fine white grits, black and red paint.
Cat. No. 23 (Figure 16):	Si18-D0183.005, Sector D, Phase D 11, Open Area deposit on a surface. Monochrome or Bichrome Painted Wavy-line Ware, jar, light brown fabric (10 R 6/8), frequent fine white, black and red grits; rare crushed shell and chaff, brown and light brown paint
Cat. No. 24 (Figure 16):	Si12-D0170.017, Sector D, Phase D 10, Deposit on lime plastered floor in Building D1, Room A. Monochrome or Bichrome Painted Wavy-line Ware, closed form, red-brown fabric (5YR5/6), rare fine black and white grits, rare golden mica, cream slip, black and red paint.

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Just a Matter of Style? Late Bronze Age Painted Pottery Traditions in the Upper Euphrates Region: Origins and Significance

Federico Manuelli

Abstract

Painted pottery is significantly attested in the main Late Bronze Age sites of the Upper Euphrates valley. It has usually been recognized as a long-lasting reminiscence of local traditions stemming from the connections that the area had with Northern Mesopotamia and Northern Syria during the early 2nd millennium BC. Nonetheless, analyses mostly focused on examining the significance that the North-Central Anatolian plain wares played in the development of the pottery repertoires of this peripheral region under the Hittite sphere of influence, often leaving aside the importance and endurance of the local traits. This article aims at contextualizing and comparing the Late Bronze Age painted pottery assemblages brought to light in the main settlements of the Upper Euphrates region. Painted pottery coming from Arslantepe, the most extensively investigated site of the area, is presented here and its origin and development described from a diachronic and regional perspective. The comparison is extended to other areas at the margin of the Hittite State, providing insights into the emergence and importance of extra-regional connections. The purpose is to define the geographical and cultural borders of this phenomenon, identifying its local aspects and understanding to which extent similarities in style might reflect common origins or shared tastes.

Keywords

Arslantepe, Upper Euphrates valley, Hittite State, painted pottery, stylistic tastes

Özet

Boyalı seramikler bilhassa Yukarı Fırat Vadisi'nin Geç Tunç Çağı'na tarihlenen başlıca yerleşimlerinde görünürler. Bölgenin, M.Ö. 2000'lerin başlarında, Kuzey Mezopotamya ve Kuzey Suriye ile olan ilişkilerine dayanan yerel geleneklerin uzun erimli yansıması olarak kabul edilirler. Araştırmalar, ağırlıklı olarak Hitit etki alanındaki bu periferik bölgenin çanak çömlek repertuvarının gelişiminde Kuzey-Orta Anadolu seramiklerinin oynadığı rolün önemi üzerinde durmakla birlikte, yerel özelliklerin önem ve dirençlerini göz ardı ederler. Bu makalenin amacı Yukarı Fırat bölgesinin başlıca yerleşimlerinde gün ışığına çıkarılan Geç Tunç Çağı boyalı seramik gruplarını çevresel öğeleriyle ele almak ve karşılaştırmaktır. Çalışmada, bölgenin en çok araştırılmış yerleşimi olan Arslantepe'de bulunan boyalı seramiklerin kökeni ve gelişimi diyakronik ve bölgesel perspektifte ele alınmaktadır. Yapılan karşılaştırmalar, Hitit Devleti'nin sınırlarındaki diğer bölgeleri de kapsar ve böylelikle bölge dışı bağlantıların önemini ve ortaya çıkışlarını kavramayı sağlarlar. Buradaki gaye, boyalı seramiğin kültürel ve coğrafi sınırlarını tanımlamak; yerel unsurlarını belirlemek ve biçimsel benzerliklerinin hangi ölçülerde ortak köken ve paylaşılmış üslupları yansıttığını anlamaktır.

Anahtar Kelimeler

Arslantepe, Yukarı Fırat Vadisi, Hitit Devleti, boyalı seramik, biçimsel üsluplar

LATE BRONZE AGE PAINTED POTTERY TRADITIONS (ARCHAEOPRESS 2022): 204–232

Introduction and research questions

Painted pottery assemblages have largely been recovered from the main Late Bronze Age sites in the Upper Euphrates region. Despite the lack of specific studies, painted repertoires always constitute a well-represented group of the published material. Generally, they are well-attested during the first part of the 2nd millennium BC sequences, while they drastically decrease from the 15th century BC onwards, purportedly in association with the appearance and spread of standardized Hittite ceramics. Although correct to a general extent, the latter assumption clearly represents an oversimplification of this phenomenon, mostly established to support the involvement of the region in the main historical events of these centuries: the Assyrian colonies trade and the Hittite expansion.

A more detailed analysis shows that the circumstances are in fact more heterogeneous and multifaceted. In contrast to the Hittite center, the Euphrates area shows a continuous and strong use of painted pottery during the second half of the 2nd millennium BC as well. Moreover, similarities in pattern decorations and associated pottery shapes lead us towards a wide set of connections that move from Anatolia to Mesopotamia up to Cilicia and Northern Syria.

Many questions are raised here: what is the role played by these painted productions on a local, regional, and extra-regional scale? What is their role within the interaction that the Upper Euphrates area developed with the surrounding regions from the final Middle Bronze Age up to the advanced Late Bronze Age? Do the affinities reveal the existence of a proper common style? And if so, are we dealing with proper aspects of emulation or imitation over long distances, or is there any other wider phenomenon of social identity or exchange involved?

In the following pages I will try to answer some of these questions through the analysis of the Late Bronze Age painted pottery assemblages brought to light in the main Upper Euphrates sites. Specific attention is paid to material from Arslantepe, as the most extensively investigated and important site of the area, evaluating it within a wider regional and extra-regional perspective.

First of all, the geographical and historical background of the region needs to be briefly introduced. The Central-Eastern Anatolian area around the provinces of Malatya and Elazığ is commonly identified as geographically coherent (**Figure 1**). The territory spread over the two sides of the Euphrates has been affected by a multitude of features originating from different regions, and by their merger with the deep-rooted aspects of the local tradition. This is mostly due to the geographical location of this area, standing in the fluvial environment between the Taurus and the Anti-Taurus chains, which allowed the penetration of a large set of influences from the Central Anatolian as well as the Syro-Mesopotamian and the Transcaucasian worlds.[1] Despite the historical sources showing that the trade route of the Assyrian colonies mostly involved the Euphrates south of this region, the introduction of new categories of material emphasizes the connections that the area somehow had with Anatolia and Mesopotamia.[2] It was in any case only during the mid-17th century BC that the Upper Euphrates began to come under the strong influence of the Central Anatolian power, as testified by the Hittite campaigns of Ḫattušili I and Muršili I.[3] However, until the time of Šuppiluliuma I, who subjugated the land of Išuwa and moved down towards the lower territories around the mid-14th century BC, this was a politically unstable area where the interests of Hittite and Mitanni clashed.[4] During the 13th century BC, the rise of the Middle Assyrian kingdom created further frictions at the Euphrates border and the protection of the eastern valley was delegated to the local ruler of Išuwa, now appointed as

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[1] See Frangipane and Liverani 2013, 349–352; Brown and Wilkinson 2017, 146–150.

[2] See Di Nocera 1998, 149–154; Şerifoğlu 2007, 102; Barjamovic 2011, 217–219; Di Filippo and Mori 2018, 41–44.

[3] Crasso 2009, 211–212; De Martino 2012, 378–381; Alparslan 2017, 212–215.

[4] Torri 2007, 236; Glocker 2011, 267–273; Devecchi 2017, 285.

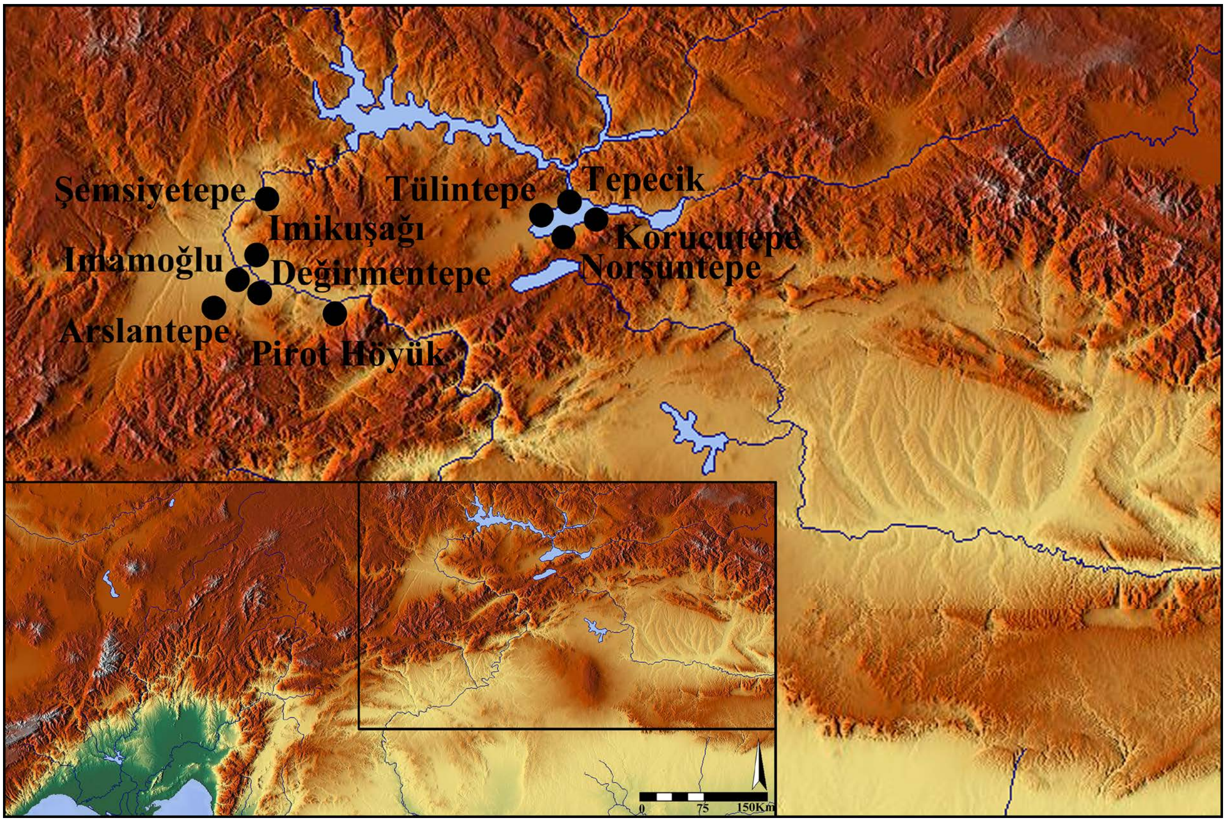

Figure 1: *Map of the Upper Euphrates region with its main investigated sites.*

a vassal of Ḫatti.[5] Henceforth, the whole region fell under a more stable Hittite control, which ceased only with the disintegration of the Central Anatolian power at the beginning of the 12th century BC.[6]

Investigations on the Late Bronze Age Upper Euphrates region

These geographical characters and historic-political circumstances lead us to see the Upper Euphrates as a region characterized by changing political connections and a proliferation of military activities. Nonetheless, it is not always easy to match and support this reconstruction with the archaeological evidence. This is mainly due to the nature of the investigations in the area, which have been mostly conducted with the aim to explore settlements that would be flooded by the construction of the Keban and the Karakaya dams. Hence, research was restricted to a limited number of settlements and often only small areas of them have been excavated, leading to the publication of fragmentary data not always fully comprehensive or reliable.[7]

This frequently resulted in a forced attempt to correlate the excavated sequences with historical events. It leads quite regularly to the misuse of the term ‘Hittite’ to identify the whole Late Bronze Age period, based on the not-always consistent appearance of North-Central Anatolian artifact-types, often due to misconceiving or neglecting the development of the local material culture.[8]

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[5] De Martino 2010; Forlanini 2014, 254–258.

[6] Liverani 2004; Manuelli 2013, 413–423.

[7] For an updated overview and related bibliography, see Manuelli 2017, 139–145.

[8] For discussions about the topic, see Glatz 2009, 129; Manuelli 2013, 399–403; Matessi 2017, 117–122; Mielke 2017, 125–140; Pucci 2019a, 173–177.

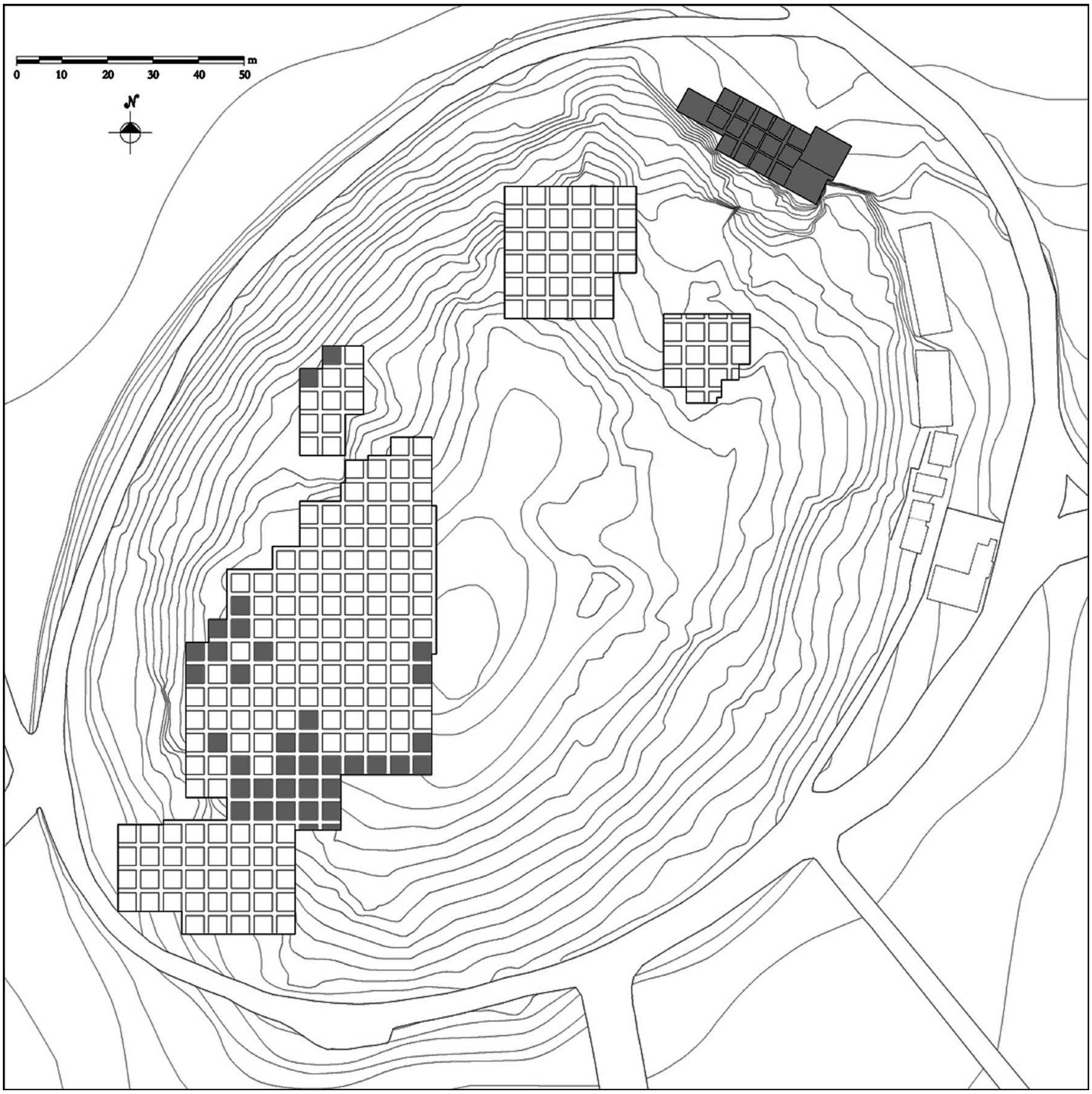

Figure 2: *Topographic plan of Arslantepe. The Late Bronze Age excavated squares from 1969 to 2018 are colored grey.*

The most recent studies on the territorial and material development of the Upper Euphrates region have in any case convincingly shown that within a generalized set of shared traits, two main cultural areas can be identified: the Malatya plain on the one hand, and the Elazığ-Altınova territory on the other, besides a sub-region corresponding to the peri-fluvial zone east of the Euphrates.[9] The set of above-mentioned geographical, historical and archaeological circumstances allows us to better comprehend how the cultural borders of the region were ambiguous and fuzzy, always changing and fluctuating according to the balance of forces between adjacent and surrounding states.[10]

Excavations in the Altınova plain and the Keban dam region were mostly undertaken in the late 1960s and the 1970s.[11] Four sites dated to the final Middle Bronze Age and the Late Bronze Age have

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[9] Şerifoğlu 2007, 111–112; Manuelli 2013, 392–397; 2017, 137–139.

[10] See Torri 2005; Liverani 2007, 8–9; Fales 2011, 9–11, 23–27; Chrzanowska 2017; Di Filippo and Mori 2018.

[11] For an updated synthesis with related bibliography, see Manuelli 2017, 139–142.

DATING (BCE)	CHRONOLOGY	ARSLANTEPE SEQUENCE		ARCHITECTURAL CONTEXTS AND EVENTS	HITTITE KINGS	HISTORICAL CORRELATIONS
		North	South			
1700	**VB1** **Late Bronze Age IA**	_ _ _ _	Phase I	● Gate system and earthen rampart (?) ● Southern dwellings phase I ● Destruction	Ḫattušili I Muršili I	Campaigns in Syria and Mesopotamia
1600	**VB2** **Late Bronze Age IB**	Vd	Phase II	● Level Vd gate-system and earthen rampart ● Southern dwellings phase II ● Destruction	Telipinu	Mitannian control of Syria
		Vc-b				
1400	**IV** **Late Bronze Age II**	Va-V	Phase III	● Abandonment of the southern part of the mound	Tudḫaliya III Šuppiluliuma I	Campaigns in Syria Control of Išuwa Elimination of Mitanni
		IVd-c				
1300		IVb-a		● Level IV gate-system	Ḫattušili III Tudḫaliya IV	Battle of Niḫriya
		IV		● Destruction	Šuppiluliuma II	Downfall of Boğazköy

Figure 3: *The Late Bronze Age sequence at Arslantepe.*

been investigated: Korucutepe, Tepecik and Norşuntepe were extensively excavated, while Tülintepe has only provided sporadic remains. The Malatya plain and the Karakaya dam region have instead been mostly explored during the second half of the 1970s.[12] Here, the only site that has supplied abundant 2nd millennium BC remains is İmikuşağı, while İmamoğlu, Değirmentepe, Pirot Höyük and Şemsiyetepe were only briefly excavated.

An exception to the above-mentioned trend of targeted research and short-term excavations is represented by Arslantepe, where the team from Sapienza University of Rome has been working since 1961 (**Figure 2**).

Because of its long-lasting investigations and reconstruction of an uninterrupted sequence covering several millennia, the site represents the cultural and chronological guide for the whole region.[13] A detailed Late Bronze Age sequence has been established at Arslantepe through seriation, by means of ordering archaeological contexts and artefacts contained in them in a chronological progression enabling us to identify the typological evolution of the material over time.[14] Three main phases have been recognized, corresponding to a tripartite relative chronology. It must be said that the use of pottery sequences to establish relative chronologies has so far played a very modest role in Late Bronze

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[12] For an updated synthesis with related bibliography, see Manuelli 2017, 142–145.

[13] See Frangipane 2011.

[14] Manuelli 2013, 326–333; 2017, 145–147; in press.

Age Anatolian studies. However, the recent application of statistical approaches to pottery from well-dated deposits at Boğazköy and other Hittite sites has allowed a better definition of the morphological transformations of their assemblages, demonstrating the utility of these procedures.[15] At Arslantepe, the sequence has also been supported with C14 dating obtained from well-contextualized samples so as to establish a more detailed chronological framework.[16] Their calibration and overlap allow us to link the three above-mentioned phases within a framework of absolute dates stretching between the 17th and the 13th centuries BC (**Figure 3**).

In a general overview, Period VB1 (Late Bronze Age IA) covers the 17th century BC. Several dwellings arranged in small elongated rooms for domestic goods storage and provided with single or double horseshoe-shape hearths have been brought to light in the southwestern part of the site.[17] The material culture shows strong links with the Middle Bronze Age tradition and contacts with Southern Anatolia and Northern Syria. At the same time, North-Central Anatolian influences are already clearly manifested throughout the whole repertoire.[18] Period VB2 (Late Bronze Age IB) nearly corresponds to the16th and the 15th centuries BC. It is characterized by the presence of an earthen rampart built through clayey soil that surrounds the whole mound and a gate system provided with protruding rectangular bipartite towers.[19] Although it seems highly plausible that the entire defensive system was already in use at least during part of the previous Period VB1, the evidence only allows us to date its destruction with any certainty, which occurred during the 15th century BC.[20] Aspects of continuity with the former period are attested in domestic architecture and pottery production. Nonetheless, a drastic increase of typical North-Central Anatolian shapes characterizes the assemblage.[21] Towards the end of the 15th century BC a violent conflagration destroyed the gate system and represents an end to the Late Bronze Age I occupation. During the following Period IV (Late Bronze Age II), approximatively covering the 14th and 13th centuries BC, remarkable changes are noticeable in the settlement pattern of the site. A gradual abandonment of the southern part of the mound and exclusive use as a dump is attested by the total lack of any structures and presence of only pits there.[22] A new chambered gateway and fortification system that now encloses only the northern portion of the mound, as a sort of military outpost, is found.[23] The material culture is mostly characterized by elements related with the Hittite influence, implying the site's new extra-regional dimension.[24]

The Late Bronze Age II gateway and related structures have been found deeply destroyed by a massive fire that was identified all over the investigated area. The conflagration has been assigned, by the archaeologists that excavated it at the end of the 1960s, to a phase that follows the disuse of the gate system.[25] Indeed, it has been assumed that the above-mentioned buildings underwent a first phase of disruption, characterized by the installation of modest structures that altered the main architectural project and suggesting a change of use before their final obliteration, marking the existence of a crisis period that might be somehow related to the events that brought the Hittite civilization to its end.

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[15] See Schoop 2006; Mielke 2006, 158–159, 174–176; Schoop 2009; Strupler 2013; Mühlenbruch 2014, 179–188; Gruber 2017, 124–138.

[16] The details of the analysis are described and discussed in Manuelli 2013, 347–353. For a synthesis and update, see also Manuelli 2017, 145–147; in press; Manuelli *et al.* 2021.

[17] Palmieri 1978, 58–71; Manuelli 2013, 48–66.

[18] Manuelli 2013, 392–397; 2017, 146.

[19] Palmieri 1978, 35–37; Alvaro 2012, 350–352; Manuelli 2013, 41–43.

[20] Palmieri 1974, 137; Manuelli 2013, 297–299, 347–353.

[21] Manuelli 2013, 392–397; 2017, 146.

[22] Manuelli 2013, 404–409.

[23] Pecorella 1975, 3–5; Alvaro 2012, 353–355; Manuelli 2013, 404–409.

[24] Manuelli 2013, 216–221, 389–391; in press; Mora 2013, 266–270.

[25] Puglisi 1968, 128; Pecorella 1975, 10.

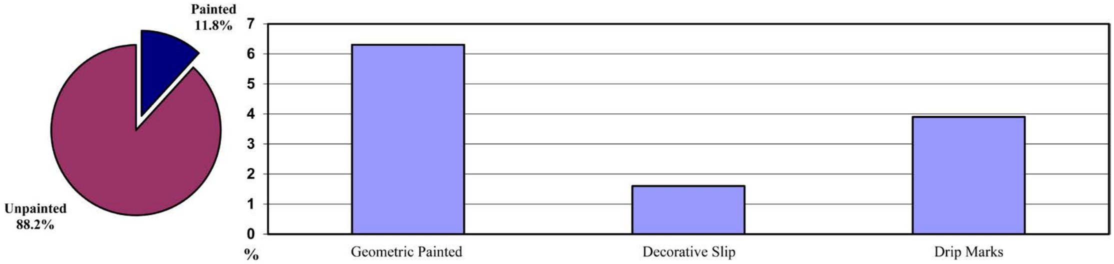

Figure 4: *Arslantepe, percentage of painted decorated pots and sherds and their patterns (total decorated items 1,092).*

Painted pottery at Late Bronze Age Arslantepe: classification and description

The whole Late Bronze Age pottery assemblage from Arslantepe consists of approximately 11,000 items. Traces of paintings are seen on 11.8% of this collection.[26] Painting is here considered as the result of the application of a fluid suspension of clay and coloring pigments onto the vessel surface, most probably always realized before firing when containers were dry or in their leather-hard stage of drying.[27] Three main types of painted techniques occur (**Figure 4**).

'Geometric painting', as an application of natural colored pigments made with brushes or sticks onto restricted parts of the vessel to create specific patterns, is the most common one. At a lower percentage a so-called 'decorative slip' is realized still using the same paint and a brush but to create a band motif which only covers restricted parts of the vessels with a vivid coating. A last category is represented by 'drip marks', consisting in a thick series of vertical and irregular colored traces of fluid suspension that drips down from the rim to the bottom of the vessels.

Geometric painted decorations are quite variable as far as their association with vessel shapes and wares as well as colors is concerned (**Figure 5**). They are mostly made on small and medium-sized neckless and short-necked jars, realized with mineral fabric and semi-fine texture wares. They also occur on large-sized high-necked jars, mainly made with mineral fabric and medium texture wares. With the exceptions of the largest containers, the production is completely wheel-made. As far as the color of the decoration is concerned, it almost always occurs in red tones: light red, light-reddish brown, and reddish-brown hues. A taxonomic classification of the decorative motifs is essential for better comprehending and interpreting the occurrence of trends and tastes. Six main motifs are distinguishable. However, a total amount of eleven patterns can be identified if we consider the merging of the main motifs on the same vessel and the occurrence of secondary and more complex decorative themes.

The design is in general modest, but it has to be considered that the fragmentation of the material clearly limits the reconstruction of more elaborated patterns. Line, stripe, and band decorations are widely attested, along with triangle and cross-hatching motifs, while other more complex themes are barely represented. Lines, stripes, and bands occur in single or combined patterns on both open and closed shapes (**Figure 6**). Carinated bowls, as well as small and medium-sized neckless or short-necked jars, are the most common associated shapes. Decorations are mostly realized with dark-red tones.

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[26] For a comprehensive description of the Late Bronze Age pottery assemblage at Arslantepe, see Manuelli 2013, 73–213. It should be stressed that the percentage of painted decorations on the whole inventory could be overestimated, since the collection methodologies of the excavations conducted during the 1960s recorded only vessels and diagnostic sherds. Hence, the proportion between diagnostic and non-diagnostic or undecorated sherds is erratic for these years.

[27] See Cuomo di Caprio 2007, 475; Laneri 2009, 105–106; Rice 2015, 161–162.

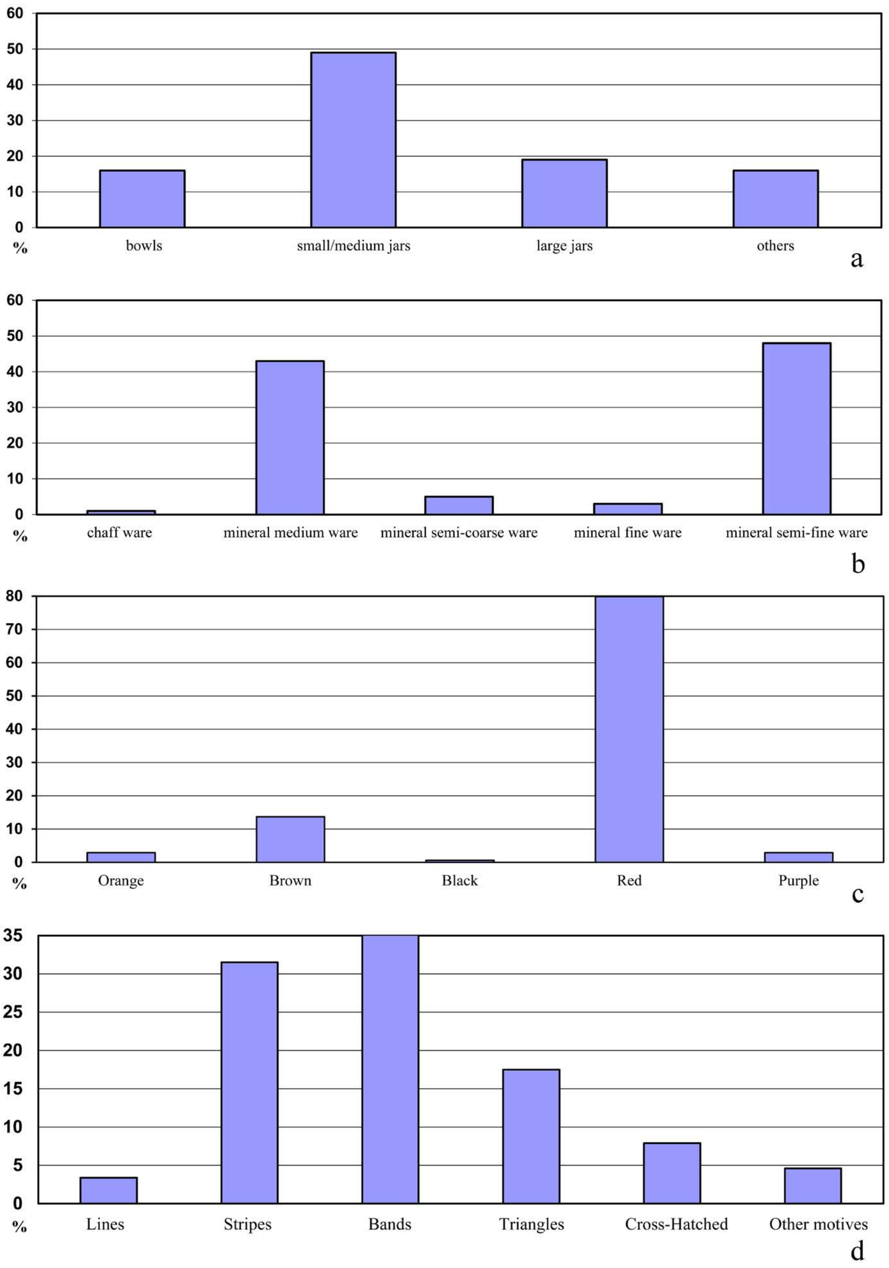

Figure 5: *Arslantepe, geometric painted decorations (total items 504). Percentage associated with (a) shapes, (b) wares, (c) colors, and (d) motifs.*

Triangles mainly occur with linear motifs realized between stripes and bands and only sporadically with filled patterns (**Figure 7**). They are attested on small and medium-sized neckless and short-necked jars and occasionally on large-sized high-necked types. Decorations are mainly realized in red, while a few examples in purple also occur.

Cross-hatching motifs are constituted by the combinations of rows of lines, stripes, or bands (**Figure 8**). They occur on kraters and on small and medium-sized neckless and short-necked jars. The color of the decoration is red or reddish-brown.

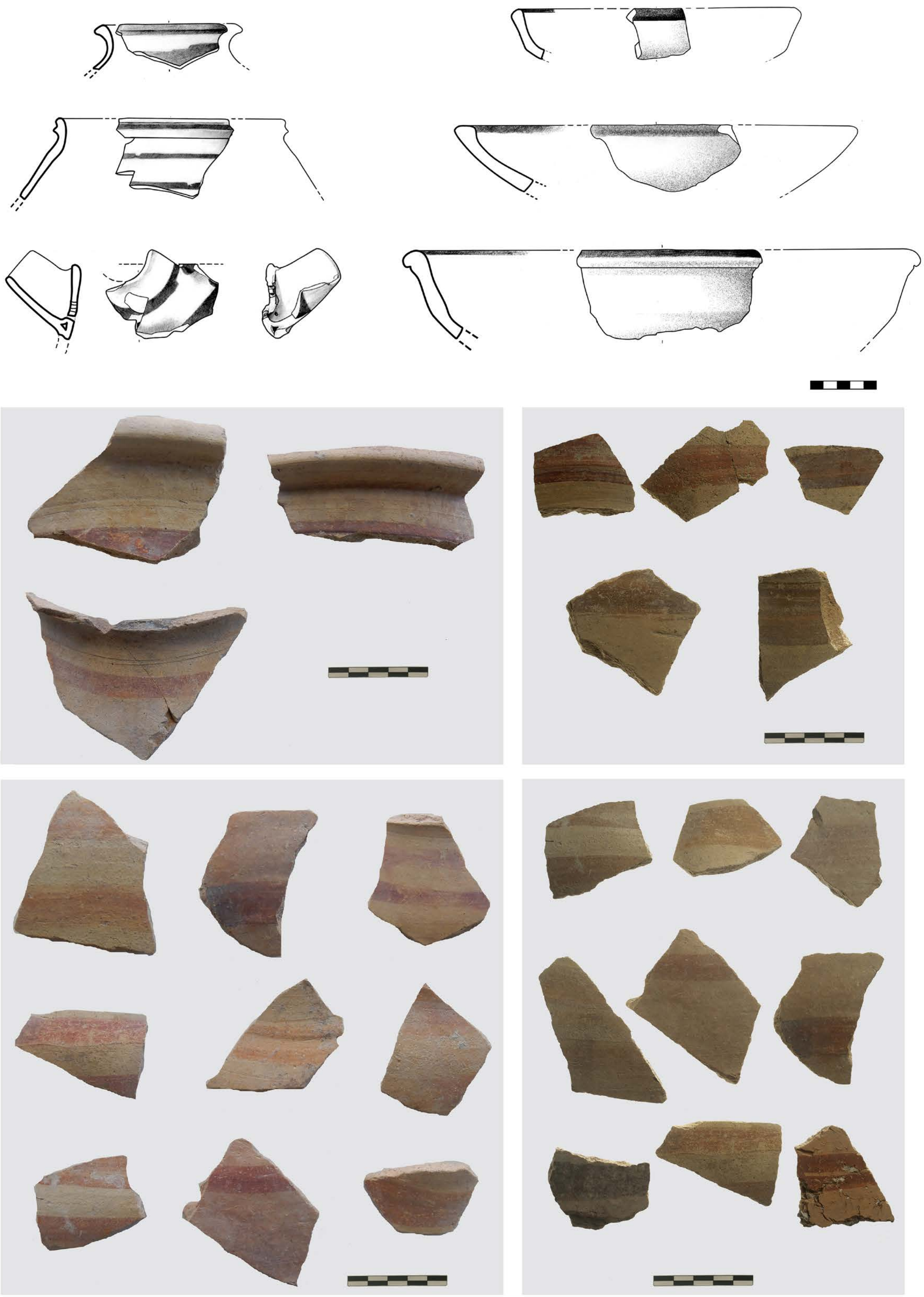

Figure 6: *Arslantepe, geometric painted decorations: lines, stripes, and bands patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli – ©MAIAO).*

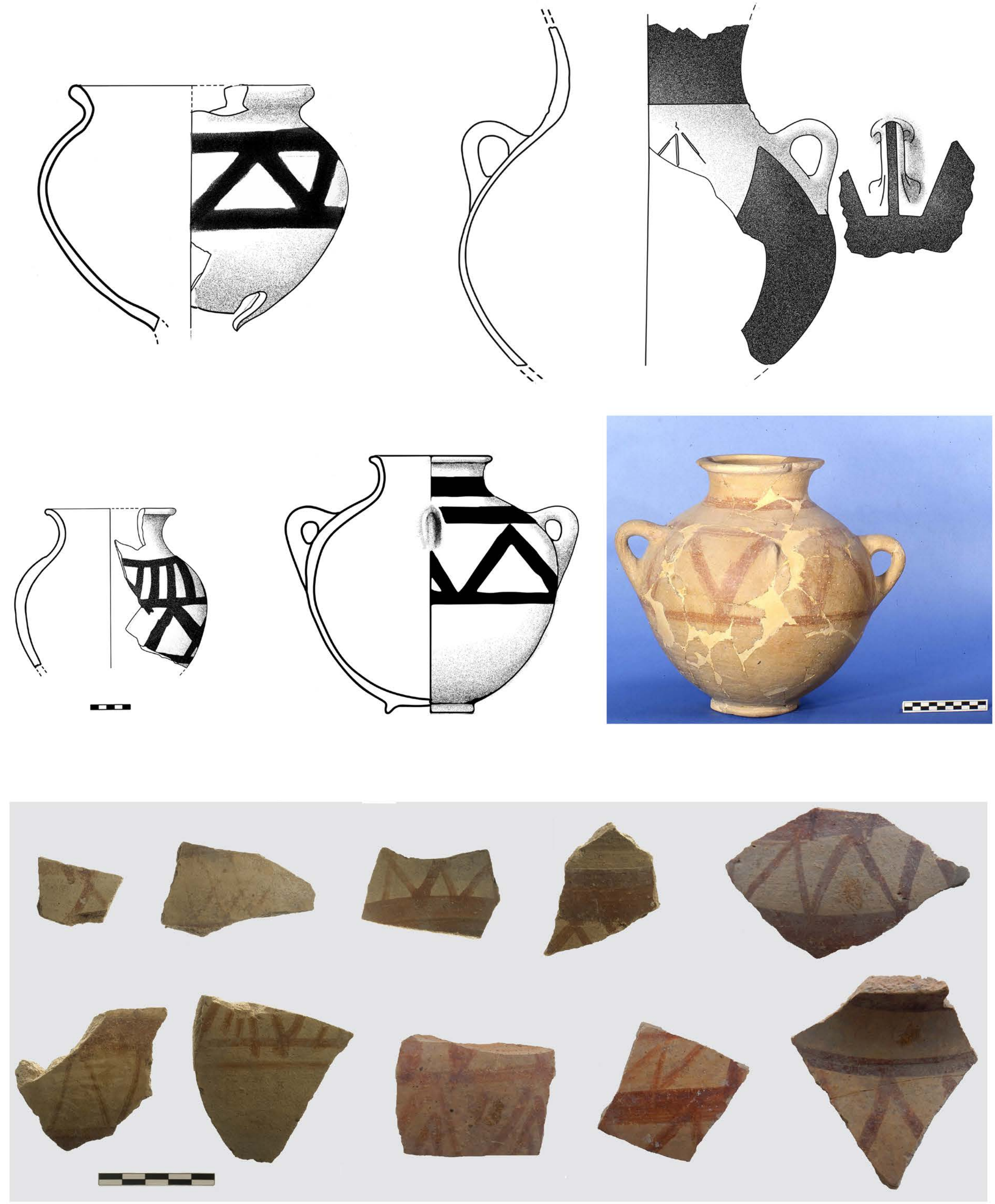

Figure 7: *Arslantepe, geometric painted decorations: triangle patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli – ©MAIAO).*

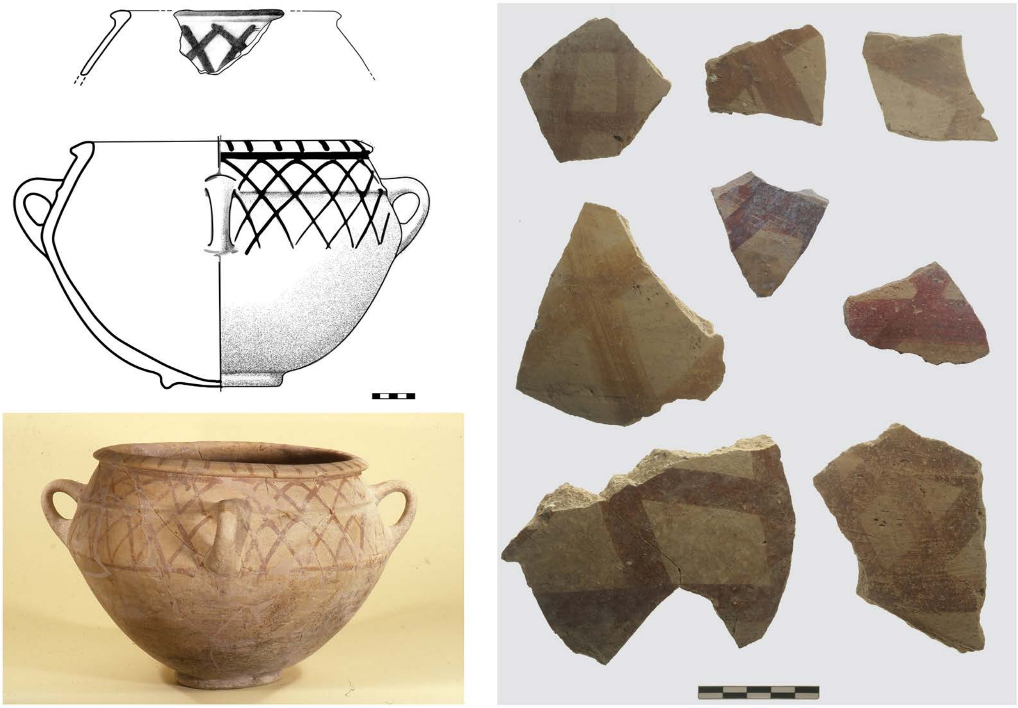

Figure 8: *Arslantepe, geometric painted decorations: cross-hatching patterns (drawings by A. Siracusano; photos by R. Ceccacci – ©MAIAO).*

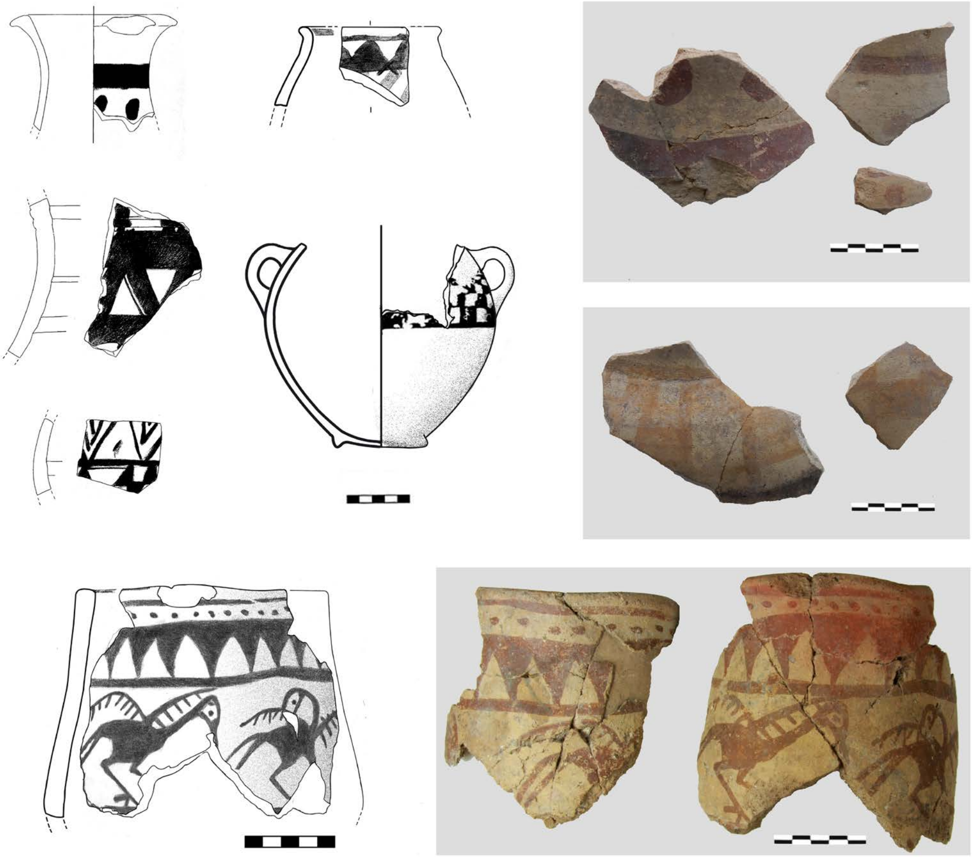

Figure 9: *Arslantepe, geometric painted decorations: complex patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli – ©MAIAO).*

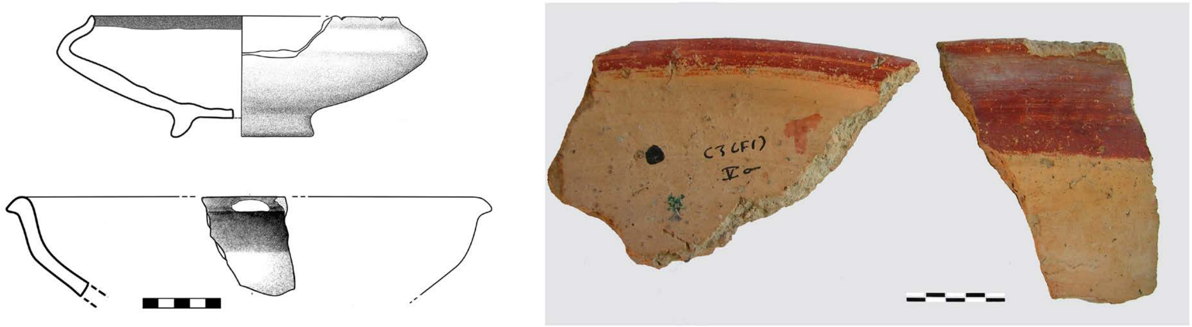

Figure 10: *Arslantepe, red decorative slip (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli – ©MAIAO).*

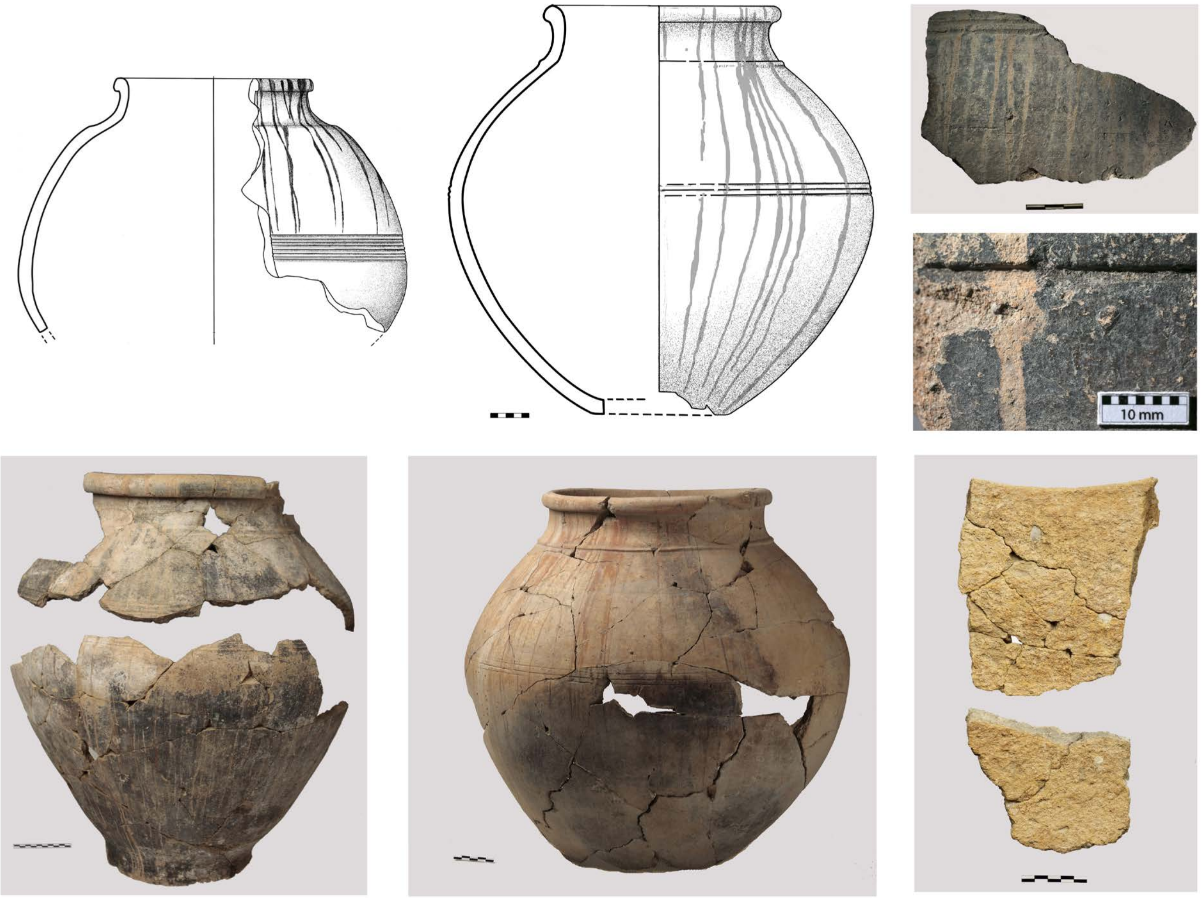

Figure 11: *Arslantepe, drip marks (drawings by A. Siracusano; photos by R. Ceccacci – ©MAIAO).*

Complex motifs are poorly represented (**Figure 9**). Dots, angles, and cross-boards patterns are attested on small-sized jars with red or reddish-brown colors. It is worth noting the presence of one fragmented shoulder beaker with figurative decoration. This is realized in red by means of a series of full triangles and dots between stripes, above three birds ready to take flight, one of them looking backwards.

Decorative slips and drip marks generally occur at lower percentages and within a more standardized set of associated shapes when compared to the geometric decorations. As far as the decorative slip is concerned, it is always realized with an intense and dense red tone (**Figure 10**). The decoration is above all realized over the upper parts of carinated bowls as well as over the rim and the neck of small and large necked jars. The associated shapes are mostly made with mineral fabrics and medium and semi-fine texture wares.

The presence of drip marks is extremely interesting (**Figure 11**). They are exclusively associated with medium-sized necked jars and pithoi realized with chaff fabrics and semi-coarse texture wares. The decoration color is always orange, light-red, and sometimes white. It also needs to be considered that the color of each single drop can easily change shade along its path on the vessel surface. Drip patterns seem to be made intentionally by letting a suspension of colored liquid drip from the vessel rims, where its traces cover the entire vase surface, down to the bottom, where it gradually wears thin. In some case it seems also plausible to assume that this effect has been emphasized thanks to the use of a double firing session that alternates oxidising and reducing atmospheres.[28] In this perspective, it is plausible to assume that these signs were created in order to indicate a specific product contained in the vessels. This hypothesis is further supported by the fact that more than the 60% of the specimens with drip marks are associated, on their internal surfaces, with a thick and porous layer. This coating was certainly intended to waterproof the surface of the vessel in case of contact with specific liquids, improving the preservation and the quality of the stored product.[29]

Local and diachronic perspectives

The described painted assemblage needs first of all to be set within the general horizon of Arslantepe pottery. Archaeometric analyses show a complete local provenience of this material and a strong continuity with the painted wares attested at the site from the end of the 3rd millennium BC.[30] In a wider perspective, the Late Bronze Age ceramic production at Arslantepe is characterized by a merging of local 2nd millennium BC traditions and North-Central Anatolian Hittite influences.[31] During Period VB1 both common mineral and chaff productions are attested. Strong links with the Middle Bronze Age tradition and contacts with Southern Anatolia and Northern Syria are especially visible through the occurrence of closed shapes, e.g. short-necked and necked cooking pots as well as necked jars and pithoi. However, North-Central Anatolian influences are also manifested through the prevalence of high funnel-necked jars and the presence of thickened-in rim shallow bowls and small-sized neckless cooking pots. During Period VB2 a drastic decline in number of the above-mentioned necked closed shapes is attested, while only the funnel high-necked jars are widespread. In this period, the pottery repertoire is characterized by a clear increase of North-Central Anatolia shapes, e.g. large plates with inverted rims, thickened-in rim deep bowls, medium sized kraters, and high-necked large and small-sized bottles. These forms all continue to be attested during Period IV, together with the appearance of new ones, such as straight wall profile flat bowls and thickened-out rim flat big bowls, that underline a definitive imposition of new trends resulting from firmer relationships with the Hittite Empire. This is also evident in the presence of pot-marks and metal weapons comparable with typical North-Central Anatolian examples, as well as of biconvex seals sometimes bearing Luwian hieroglyphic inscriptions. From a technological point of view a simplification, standardization and deterioration of the production

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[28] See Roux 2017, 137–138. For a description of this procedure see also the contribution presented in this volume by Fragnoli and Rodler.

[29] Organic residual analyses have been carried out on samples from pithoi found *in-situ* in room A1200. Analyses are still running ongoing the direction of G.M. Di Nocera from the *Dipartimento di Scienze del Mondo Antico* of *Università della Tuscia*, Viterbo, Italy (Di Nocera 2016). At present, only infrared analyses (FTIR) have been completed and unidentified organic remains have been distinguished. New chromatography and mass spectrometry analyses are expected to be carried out for a more precise identification of the substances contained into the vessels.

[30] See Fragnoli and Mallegni 2016. See also the contribution presented in this volume by Fragnoli and Rodler.

[31] Manuelli 2013, 392–397; 2017, 147–149.

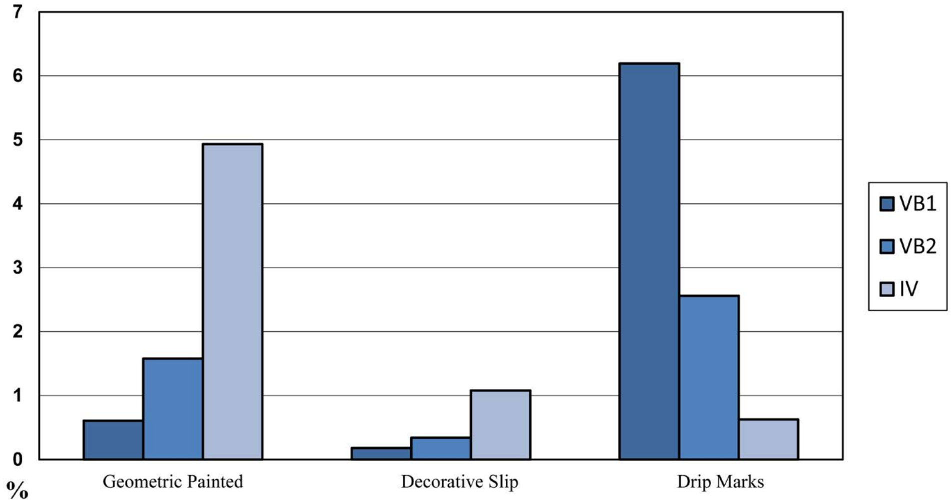

Figure 12: *Arslantepe, quantitative development of painted decorations over time (total items 1,092).*

is attested through a decrease of the number of pottery types and an increase of mineral tempered wares as well as deformed, over-fired and dark-cored sherds.[32]

This diachronic evolution can also be seen if we include the above-mentioned painted pottery. Indeed, on a temporal perspective it can be noted that geometric paintings and decorative slips increase over time, corresponding to a clear reduction of drip marks (**Figure 12**). Despite the fact that the changing percentage of decorative slip is not significant, since its quantity is always very limited, it is also clear that drip marks are typical of the beginning of the Late Bronze Age while geometric painting characterizes the later phases.

Over a longer timeframe, the presence of linear geometric decorations indicates a clear continuity with the local wheel-made monochrome painted ware attested at the site during the Middle Bronze Age.[33] When compared with the Late Bronze Age production, these earlier painted pottery shows an association with more depurated clays and paler pastes. It is important to stress that the appearance of wheel-made geometric painted wares during the Middle Bronze Age represents a break with the previous late-3rd millennium BC tradition at the site, which was instead characterized by the prevalence of handmade painted ceramics associated with complex decorative patterns.[34] The development of this new style and tendency might be seen in association with the general spread, attested during the first half the 2nd millennium BC, of other geometric painted ceramics, such as the Khabur Ware in Northern Mesopotamia and the Syro-Cilician Wares in the Levant.[35]

The decorative slip also originates at the site during the Middle Bronze Age.[36] This is a well-known red slip wheel-made production that essentially differs from the Late Bronze Age one since is characterized by a very uniform and dense dark-red coating, sometimes even polished and applied to the whole vessels, mostly on bowls. The spread of red-slip wares at Arslantepe during the Middle Bronze Age probably derives by the contacts that the site developed with the Central Anatolian region during the

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[32] For recent discussions about standardized pottery production during the Hittite period, see Schoop 2011; Glatz 2015; Horowitz 2015, 153–159; Mühlenbruch 2014, 191–194; Mielke 2016, 161–163; Pucci 2019a, 173–177.

[33] See Di Nocera 1998, 79–85.

[34] Fragnoli and Mallegni 2016.

[35] For an overview on the spread and relationship between these wares, see Bieniada 2009.

[36] See Di Nocera 1998, 67, 84–85.

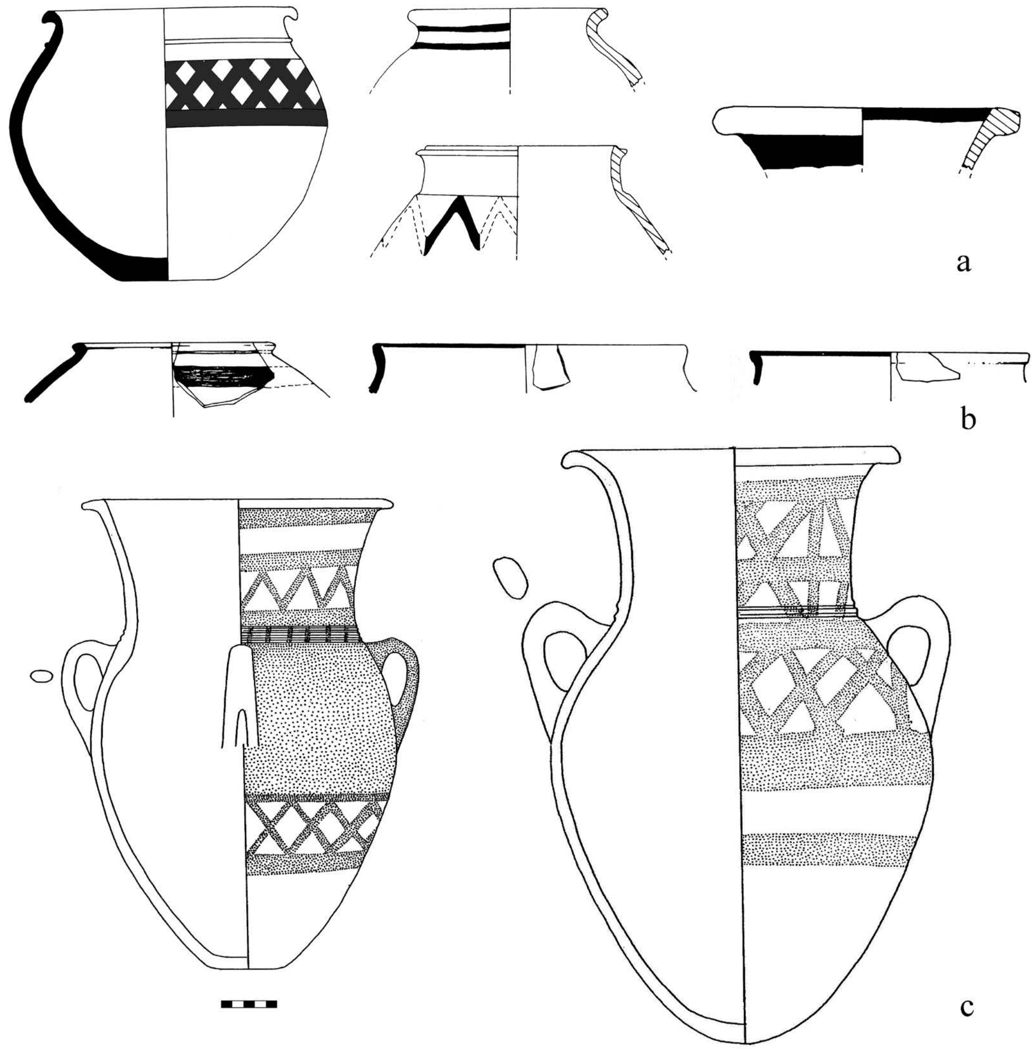

Figure 13: *A selection of Late Bronze Age geometric painted pottery assemblage from (a) Korucutepe (adapted from Griffin 1980, Pl. 4c; Umurtak 1996, Lev. 16.2, 3, 7); (b) Norsuntepe (adapted from Korbel 1985, Taf. 139.1591, 140.1053, 1820) and (c) İmikuşağı (adapted from Konyar 1998, Lev. 17.Va.1.a.a.1, Lev. 27.Va.3.1).*

Kārum period.[37] Unlike the geometric painting and decorative slip decorations, drip marks represent a completely new trend, since they do not show any specific development from the previous periods attested at Arslantepe and they seem to represent a distinguishing mark of the Late Bronze Age tradition at the site.[38]

As a last consideration, it should be also stressed that the painted productions described here completely disappeared at the end of the Late Bronze Age and that in general decorations are virtually absent in the whole ceramic assemblage of the Early Iron Age at Arslantepe.[39]

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[37] Di Nocera 1998, 149–154. For discussions on the development of this ware, see also Schoop 2011; Gruber 2017, 94–95; Orsi 2018, 193–194.

[38] The significant presence of drip marks on the Late Bronze Age pottery at Arslantepe had been already acknowledged during the first round of excavations at the site, see Pecorella 1975, 33.

[39] Manuelli 2018, 150–155.

Regional and extra-regional comparisons

The assessment of the local and temporal horizon of the Late Bronze Age painted pottery assemblage from Arslantepe allows us to contextualize this material within a wider set of comparisons, so as to reconstruct its specific areas of distribution and relationships with other regions.

First of all, it must be considered that painted pottery is generally rare in the Hittite world and when attested they are mainly concentrated in the earliest Late Bronze Age phases.[40] Some of the simple geometric decorations occurring at Arslantepe show similarities with a few linear geometric patterns attested on Hittite pottery in North-Central Anatolia, which find their roots in the late-Early and the Middle Bronze Age periods.[41]

From a closer geographical perspective, geometric painted decorations very akin to those from Arslantepe are attested in the Upper Euphrates region, especially in the earliest Late Bronze Age levels at İmikuşağı and Korucutepe, and at lower quantities at Norşuntepe as well (**Figure 13**).[42] We should specifically mention İmikuşağı, where in Level 10, which can be dated to a transitional Middle-Late Bronze Age phase approximatively corresponding to the 17th century BC, painted pottery is ubiquitous.[43] Besides the presence of typical linear geometric patterns, the repertoire also includes the prominent occurrence of complex motifs that are associated with almost all of the closed shapes attested at the site.

Interesting similarities with the geometric repertoire from Arslantepe emerge when we look at the material coming from the Elbistan plain, in both the excavations conducted at Karahöyük and the survey carried out in the region.[44] Moreover, it is important to remark that comparable painted sherds have also been found in the survey conducted in the Kahramanmaraş region.[45]

One of most interesting set of comparisons with the material from Arslantepe stems in any case from the Late Bronze Age painted pottery coming from South and South-Eastern Anatolia, specifically from the main sites in Cilicia to the Amuq valley.[46] These productions probably find their origins in the well-known Syro-Cilician wares that spread during the Middle Bronze Age across a wide region stretching across the Orontes valley to the Euphrates on one side and to the Amanous mountains and Cilicia to the other.[47] For example, a reasonable quantity of geometric painted sherds, comparable with the repertoire from Arslantepe, characterizes Level III at Kilise Tepe.[48] As far as some of the more complex painted designs are concerned, interesting affinities are especially visible with the Late Bronze Age levels at Tarsus.[49] Further interesting similarities can also be seen specifically with the local painted monochrome wares from Phase M at Chatal Höyük in the ʹAmuq.[50]

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[40] Schoop 2009, 148–150; 2011, 245–258; 2013, 356–360; See also the introductory article presented in this volume by Manuelli and Mielke.

[41] See examples from Büyükkale (Fischer 1963, Taf. 13–20); See the introductory contribution presented in the volume by Manuelli and Mielke.

[42] See Umurtak 1988, Lev. 181; 1996, Lev. 31; Konyar 1998, Lev. 14, 45–46; 2002, 415–416, Lev. X–XI; Griffin 1980, Pl. 14.

[43] See Konyar 2006.

[44] See Özgüç T. and Özgüç N. 1949, 85–86, Lev. XLVI; Çifçi and Greaves 2010, 93–94.

[45] See Konyar 2007.

[46] See the contributions presented in this volume by Kozal, Jean, Ünlü, and Horowitz.

[47] Bagh 2003, 220–223, 231–235.

[48] See Hansen and Postgate 2007, 330–331, Fig. 387, 389, 391. For further discussions, see also Bouthillier *et al.* 2014, 141–144.

[49] See Goldman 1956, Pl. 379; Korbel 1987, Taf. 43.

[50] See Pucci 2019b, 65–67, 70, 177, Pl. 45–46, 144.

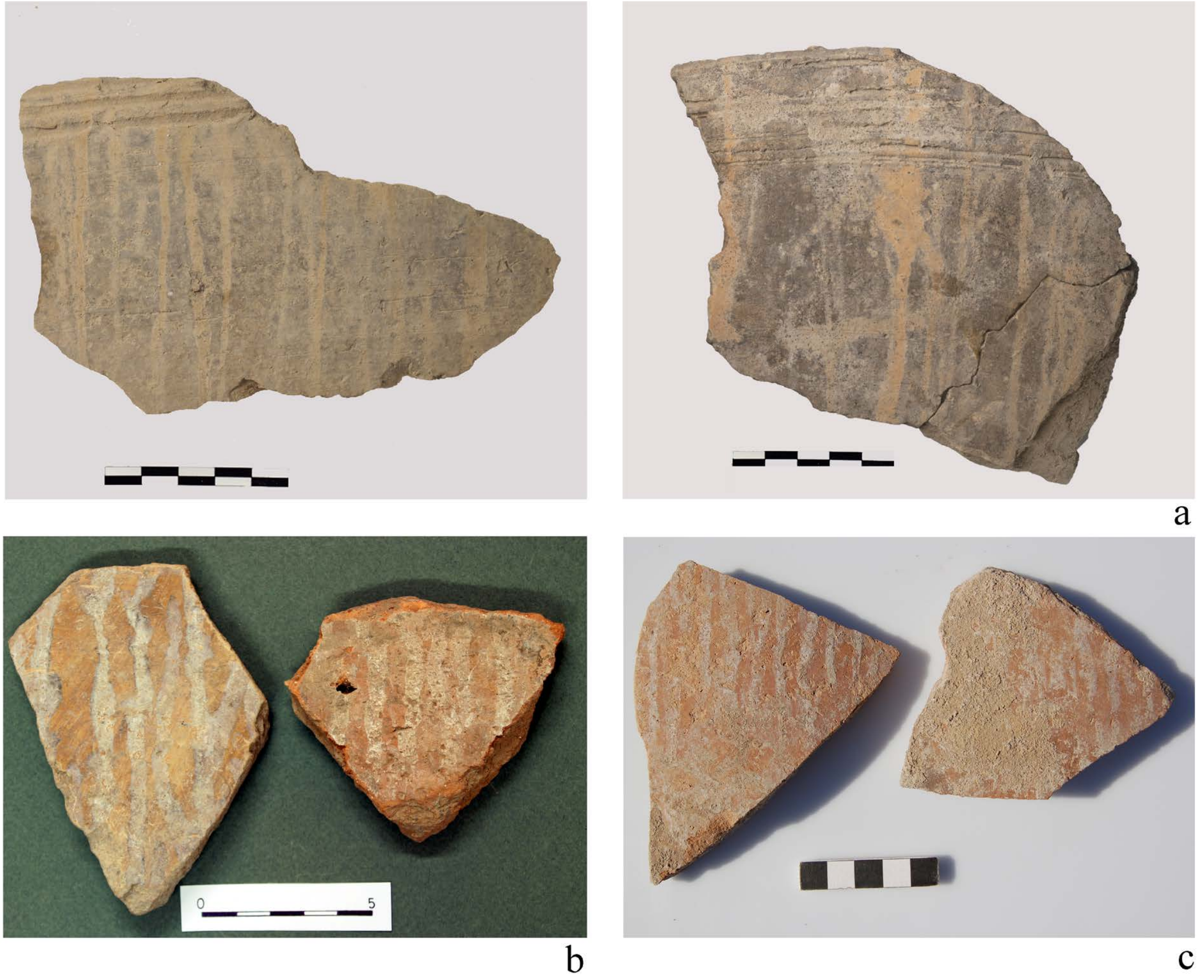

Figure 14: *Drip marks from (a) Arslantepe (photos by R. Ceccacci – ©MAIAO), (b) Giricano (courtesy of A. Schachner – ©Giricano Expedition Archive) and (c) Hirbemerdon Tepe (adapted from D'Agostino 2016, 651, Tav. 105).*

The shoulder beaker with figurative decoration belongs instead to a different cultural sphere and its presence at Arslantepe shows fascinating affinities with the Mesopotamian world. Indeed, this type of décor should be related to the Late-Khabur Ware and to its spread from the Jazira region, in Northern Syria, up to Central-Eastern Anatolia approximately during the third quarter of the 2nd millennium BC.[51] Monochrome painted decorations with geometric or figurative motifs associated with shoulder beakers with slightly rounded belly are typical of this production.[52] Despite the fact that the decoration of the Arslantepe beaker seems to fit perfectly within the Late-Khabur style, it should also be considered that its fabric is coarser, and the figures are rendered very rough compared with those from North-Eastern Syrian sites. It might be thus possible to assert that the vessel represents a local imitation of this well-known production.

Colored slips represent a decoration technique typical of North-Central Anatolia during the whole 2nd millennium BC.[53] This is a characteristic feature of the Hittite repertoire, usually employed to emphasize those parts of the vessels where a clear change in the profile is visible, e.g. on carinated shapes. The technique derives from the final Early Bronze Age phases of the main sites in Central Anatolia, continuing through the 2nd millennium BC with a peak during the Kārum and Old Hittite periods.[54] During the 16th century BC slipped parts start to be reduced to the rim of the vessel and red-coated specimens gradually disappear.[55] It should be also considered that red-slipped wares are well-attested in the Jazira as well, especially during the third quarter of the 2nd millennium BC and peaking in the 14th century BC.[56] In this case, a great variety of shapes are also associated with this decoration, mainly bowls entirely or partially covered by the red painting. Shallow bowls and plates with red-edged rim are widespread in the Upper Khabur up to the Upper Tigris region and are usually considered as typical markers of the Mitannian material culture.[57] Besides Arslantepe, red decorative slips are attested in the Middle Bronze Age levels of the main sites of the Upper Euphrates area as well and their production continues during the Late Bronze Age.

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[51] See Oguchi 1997, 195–196; Pfälzner 2007, 237–244.

[52] See specific comparisons with Tell Brak (Oates *et al.* 1997, 201–203); Tell al-Rimah (Postgate *et al.* 1997, 203–207, Pl. 76–78); Tell Chagar Bazar (McMahon *et al.* 2009, 379, Pl. 68).

[53] Schoop 2011, 244. See also the description provided by D'Agostino and Orsi 2015, 83–85.

The drip marks appear instead as a peculiar characteristic of the Late Bronze pottery production at Arslantepe. If we look for similarities, small strokes or dribbles of paints are often visible on Khabur Ware.[58] Nonetheless, in most of the cases these seem have been made accidentally.[59] Moreover, in a few instances the signs on Khabur Ware take the shape of vertical undulating lines that, although more linear in pattern and closer to a proper wavy painted decoration than to irregular drops, resemble those from Arslantepe.[60] White colored, irregular, vertical and wavy lines, probably made by letting a solution of clay mixed with diluted lime drip on the vessel surface, are attested on sherds belonged to the so-called Red Brown Wash Ware, a hallmark production of the Middle Bronze Age in the Upper Tigris region.[61] Despite the fact that no specific analyses have been conducted on it so far and only very little material has been published, these white drip marks are attested on several sites of the region.[62] Specific relevance has been recently attributed to this production thanks to the survey activities conducted around the site of Pir Hüseyin, where the presence of a 'Dribbled White Wash Ware, decorated with a thick white wash, which was allowed to drip down the sides of the vessels' has been identified.[63] If we compare this Dribbled White Wash Ware from the Tigris region with the examples of white drip marks from Arslantepe, a clear similarity emerges, showing fascinating affinities between the two productions (**Figure 14**).[64]

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[54] Schoop 2011, 244, 260.

[55] Schoop 2009, 151, 155. See also Parzinger and Sanz 1992, 47; Müller-Karpe 1988, 19–20. A similar evolution of this decoration can also be highlighted in the sequences of Gordion (Gunter 1991, 46–49) and Kaman-Kalehöyük (Matsumura 2005, 431; Katsuno 2004, 99–101).

[56] Pfälzner 2007, 247–248.

[57] D'Agostino 2014, 173–182.

[58] See, e.g. Chagar Bazar (McMahon *et al.* 2009, 263–271, Pl. 10–14, 279, Pl. 18, 283–287, Pl. 20–22); Tell Mozan (Schmidt 2013, Taf. 246–250, 258, 390–393, 402, 443); Tell Brak (Oates *et al.* 1997, 181, Fig. 190, 185, Fig. 192; McDonald and Jackson 2003, 297–301, Fig. 7.23–7.25, 304–312, Fig. 7.27–7.31); Tell Barri (Baccelli and Manuelli 2008, 199, Pl. 2, 201, Pl. 4); Tell el-Rimah (Postgate *et al.* 1997, 167, Pl. 58, 171, Pl. 60, 199, Pl. 74, 207, Pl. 78); Tell Rijim (Koliński 2000, 116, Pl. 13, 120, Pl. 15, 156, Pl. 32).

[59] Koliński 2000, 57. Actually, at Tell Brak and Tell al-Rimah the presence of a paint splash is constantly associated with carefully made Khabur decorations, suggesting a deliberate realization of these signs (Oates *et. al.* 1997, 64; Postgate *et al.* 1997, 52). See also McMahon *et al.* 2009, 170–171 on this topic.

[60] See, e.g. Salat Tepe (Ökse and Gormüş 2006, 174–175, Fig. 17); Giricano (Schachner 2002, 46–48, Abb. 38).

[61] D´Agostino 2016, 81.

[62] See, e.g. Salat Tepe (Ökse 2014, 157–159, Fig. 3); Hirbemerdon Tepe (D´Agostino 2016, 81, 651, Tav. 105); Pir Hüseyn (Peasnall and Algaze 2010, 174, 195, Fig. 15). Significative amounts have been also identified at Ziyaret Tepe and Giricano (P. Bartl, personal communication).

[63] Peasnall and Algaze 2010, 174.

[64] Looking at the later periods, the presence of dark colour drip patterns is commonly attested on the Levantine roman amphorae. Their presence was due to pitch, which was dropped inside the vessels in liquid form and then poured out causing these long runs of dark colours, see Reynolds 2000; Woodworth 2011.

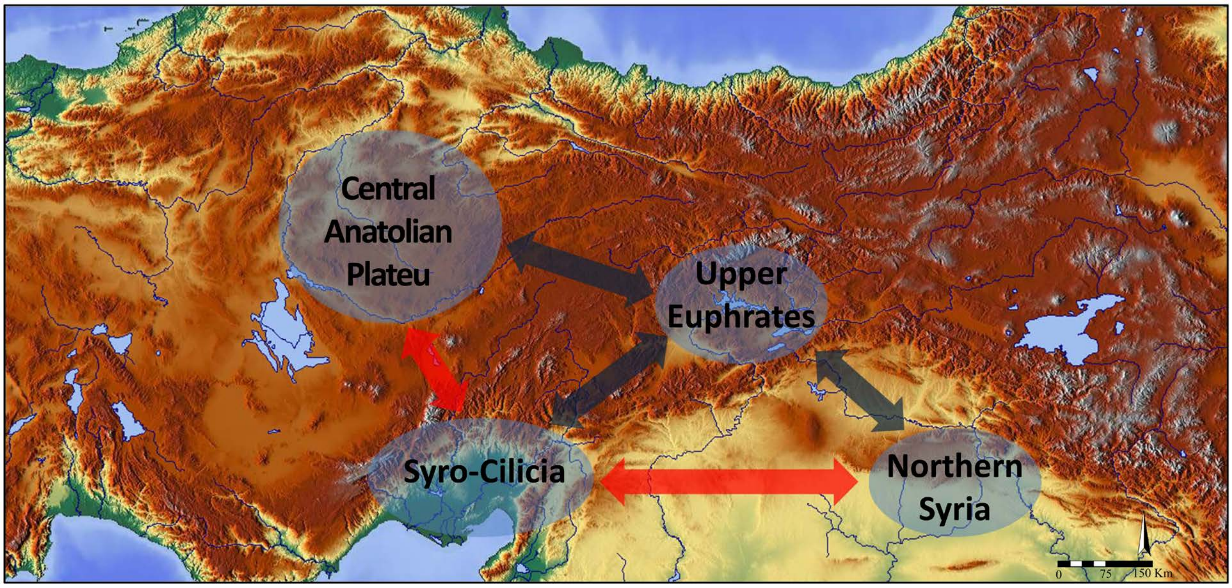

Figure 15: *Late Bronze Age painted pottery in the Upper Euphrates region: channels of interrelationships.*

Channels of interrelationship

This analysis identifies the affinities that the Late Bronze Age painted pottery tradition of the Upper Euphrates area shows with three main cultural regions: the Central-Anatolian plateau, the Upper Khabur and Upper Tigris valleys, and the Syro-Cilician world. Their interaction and relationships are evaluated here in an attempt to establish whether similarities in material culture and especially decorative patterns might reveal aspects of a community of taste and style. The first thing to note is that each painted pottery tradition shows cultural borders that are highly ambiguous. Indeed, decorative patterns that, in most of the cases, are similar to each other are widespread within approximatively the same time span in all of the regions here considered. This of course creates more than a few problems when trying to identify proper trajectories of influence and to evaluate the impact that each of these traditions might have produced in Upper Euphrates region, especially considering the nature of this area as a bridge of cultures.

Two main sets of connections can be in any case isolated (**Figure 15**). The first is a two-way channel of influences that has deep roots into the Middle Bronze Age and that runs on an east-west track crossed by the Euphrates area at one point. The geometric painted decoration of the Late Bronze Age at Arslantepe and the main sites of the Upper Euphrates certainly derives from the development of similar prototypes that are attested in the region during the first quarter of the 2nd millennium BC. Their origin has been usually seen as a local variation and adaptation of the Northern Mesopotamian Khabur Ware. Similarly, the Late Bronze Age decorative slip seems to develop from the local Middle Bronze Age red-slip production attested all around the Upper Euphrates region, stemming from similar productions mainly attested in the Kārum period in Anatolia.

The long-distance trade route of the Old Assyrian colony period mostly affected the Euphrates area south of the Malatya-Elazığ region.[65] However, the existence of routes coming from Ergani Maden, crossing the Eastern Anatolian region north of the Taurus range, has been also postulated.[66] In any case, the echo of this trade clearly somehow reached the Upper Euphrates region, influencing its local material culture and bringing the assimilation of specific external features that continued to be used and re-elaborated even during the Late Bronze Age. This is mainly visible in the pottery repertoire of the Middle Bronze Age closed shapes attested at Arslantepe and other sites of the region. The most resounding evidence is the spread of the high funnel-like necked jars, typical of Kültepe Levels II-Ib and later attested in all the main Hittite sites.[67] In this framework, it is important to mention the discovery recently made at Arslantepe of a cylindrical seal belonging to the Anatolian group of the glyptic style of the Kārum period contemporary with Kültepe Level II.[68] Moreover, routes connecting the eastern part of the Kızılırmak bend to the east are also well attested.[69] Specifically, from Kuşaklı several valleys allow access to the Tohma Çay and join the Euphrates north of the Malatya plain, and alternatively eastern routes connect the Kuru Çay from the Kangal valley.[70] This connectivity is further confirmed by the fact that relationships in material culture, linking the Upper Euphrates and the North-Central Anatolian region, do not just suddenly appear during the Middle Bronze Age, but rather are attested since the mid-4th millennium BC.[71]

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[65] See Palmisano 2017.

[66] See Oguchi 1999, 100–101; Forlanini 2006, 168–169; Di Filippo and Mori 2018, 43–44.

This path of east-west connections seems to be only partially maintained during the Late Bronze Age. Indeed, if the weight of the influence of the Hittite material culture on the main sites of the Upper Euphrates region during this period is well-known and distinguishable, there is only slight evidence of any connections with the Northern Mesopotamian region. It is actually hard, at the current state of the research, to interpret the presence of the drip marks from Arslantepe as a direct development of similar patterns occurring in the Upper Tigris valley during the Middle Bronze Age. First of all, because of the relative low quantity of known material coming from the Tigris region belonging to this group and consequently the absence of any specific study on it, and second because of the total lack of drip marks on the pottery assemblages from sites in the Keban dam region and the fact that the case of Arslantepe appears as a completely isolated example within the whole Upper Euphrates. In any case, the abundance of complex painted geometric motifs belonging to the pottery assemblage of İmikuşağı Level 10 can instead be seen as evidence of the continuation of the Khabur Ware influence in the region.[72] Certainly, a further confirmation of this assumption might also be found in the presence of the Late-Khabur Ware shoulder beaker from Arslantepe, which suggests the existence of some form of contact between the above-mentioned areas during the advanced Late Bronze Age.

However, it seems that besides the presence of Khabur Ware, other forms of influence from Northern Mesopotamia failed to fully impact the Upper Euphrates material culture. Mitannian Nuzi Ware is for instance only attested through a very few sherds from Tepecik, while it is totally unknown at any other site of the whole region.[73] On a wider scale of comparisons, looking for instance at the glyptic material, biconvex Hittite-style seals and seal impressions have been discovered in abundance at Arslantepe, Norşuntepe, Tepecik, and Korucutepe.[74] In contrast, proper Mesopotamian specimens are definitely more isolated. At Arslantepe one Old Babylonian, one Mitannian and two Middle Assyrian seals have been discovered.[75] Moreover, some few Mitannian-style cylindrical seals have been found at Norşuntepe, Tepecik, and Korucutepe.[76]

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[67] Schoop 2009, 165. See also Di Nocera 1998, 153; Şerifoğlu 2007, 102; Özgüç T. and Özgüç N. 1953, Lev. XXXIII; Özgüç T. 1950, Lev. LI; 2003, 146.

[68] For discussions and comparisons, see Manuelli 2013, 385–388.

[69] Barjamovic 2011, 214–216.

[70] Ökse 2007.

[71] See Çalışkan Akgül 2012.

[72] See Sevin 1984, 102, Fig. 11; Sevin and Köroğlu 1985, 178, Fig. 12; For an updated synthesis of the Middle Bronze Age Khabur Ware chronology, see Pfälzner 2017.

[73] See Esin 1971, 131, Pl. 91.2.

[74] See Mora 2013 (Arslantepe); Hauptmann 1974, Pl. 80, 2–3 (Noršuntepe); Esin 1971, Pl. 88 (Tepecik); Güterbock 1980; Ertem 1988, Kat 6.8–9 (Korucutepe).

A second two-way channel of contacts follows a north-south flow instead. Indeed, connections with Cilicia during the Late Bronze Age are remarkable. Strong similarities can be specifically emphasized between the geometric painted pottery from Arslantepe and Tarsus. Moreover, it is also very interesting to note that the painting production from Tarsus specifically contains some of the exact decorative motifs also recurring at Korucutepe.[77]

Once again, the origin of this long-distance contact could be found in the Middle Bronze Age tradition and specifically in the development and spread of the Syro-Cilician Wares. Routes from Cilicia to the Upper Euphrates are well-known, especially across the Kahramanmaraş plain, following the Ceyan river and though Gölbaşı.[78] Otherwise, eastward roads lead toward the Euphrates roughly in the area of the Atatürk dam.[79] An interesting crossroad is also represented by the Elbistan area, which is easily reachable from the Malatya plain and from which routes to North-Central Anatolia northward and to Cilicia southwards are attested.[80] It is actually interesting to note how the affinities linking Arslantepe as well as the others sites of the Upper Euphrates region with Cilicia and partially with the Northern Levant are not exclusively represented by painted decorations. The most remarkable relationships are indeed attested by the presence of closed pottery shapes, i.e. short-necked and necked cooking pots and jars, that are well-known in Cilicia up to Northern Syria and very typical of the earliest Late Bronze Age phases at Arslantepe but, interestingly, are totally unknown to the core of the Hittite world.[81]

From a wider perspective, it seems that the development of the linear painted geometric patterns during the 2nd millennium BC in the Upper Euphrates was due to the concurrence and combination of two specific cultural influences exerted on the one hand by the Khabur area and on the other by the Syro-Cilician region. The appearance of red-slip decorations in contrast entirely follows the Anatolian tradition, while drip marks mostly appear as a local trend although interesting comparisons lead to affinities with the Upper Tigris region.

This multidirectional impact of Northern Mesopotamian and Levantine trends reflects the large set of relationships between these regions during the whole 2nd millennium BC. Indeed, the existence of a reciprocal wide-range influence affecting the origin and development of both the Khabur and the Syro-Cilician wares has been repeatedly assumed by scholars over the years.[82] Moreover, in an even wider geographical sphere of relationships, we should not ignore how the presence of geometric painted decorations in Central Anatolia and Cappadocia has often been interpreted as deriving from contacts developed with Cilicia.[83] In this global perspective, the Late Bronze Age painted pottery traditions of the Upper Euphrates region developed continuously from a wide and complex phenomenon of mutual influences that stemmed from the Middle Bronze Age and that involved a large geographical area. This seems to find a suitable crossroad in the Arslantepe site, where many trends originating from different regions got assimilated and re-elaborated within a new set of original styles.

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[75] See Mora 2013, 259–261.

[76] See Hauptmann 1970, Pl. 53; Van Loon 1980, Pl. 46H, 49P; Esin 1971, Pl. 88.1.

[77] Umurtak 1996, 104.

[78] See Gates 2011, 400; Barjamovic 2011, 216–217; Di Filippo and Mora 2018, 51–53.

[79] Dodd 2007, 210.

[80] Barjamovic 2011, 215; Çifçi and Greaves 2010, 98; Di Filippo and Mori 2018, 51–53.

[81] See Manuelli 2013, 154–167, 370–373, 383–392.

[82] See Nigro 1997, 287–291; Oguchi 2001; Bagh 2003; Bieniada 2009.

[83] Di Nocera 1998, 121, 153.

The complexity of the plain motifs: a matter of style and utility

In light of what has been discussed here, some final observations are in order. The Late Bronze Age painted pottery tradition of the Upper Euphrates valley does not develop as an isolated local case. Its origins do not seem to be related to a proper regional development, but rather to the wide set of relationships that the Upper Euphrates started interweaving with the surrounding areas during the Middle Bronze Age. Indeed, the emergence of wheel-made monochrome geometric painted productions, as well as colored slips at the beginning of the 2nd millennium BC, shows a clear break with the previous regional system of painted decorations of the final Early Bronze Age, projecting the region towards a new set of international contacts. Hence, the development of the painted pottery tradition of the Late Bronze Age reflects a local adaptation to a broad range of diachronic and geographic phenomena.

Despite the fact that the political expansion of the Hittite State towards this region, from approximatively the 15th century BC onwards, corresponds with a gradual disappearance of the more complex geometric painted patterns, it is also noteworthy that the simple decorative motifs continue to characterize the pottery repertoires of these sites until the end of the Bronze Age. Moreover, it is also important to stress that none of the geometric painted decoration overlaps with the typical Hittite pottery shapes, as though the two traditions did not interfere or intertwine with each other, rather running through two different and parallel sets of cultural models.

It is nonetheless difficult to trace the proper reasons behind the appearance and development of this painted tradition. The spread of similar patterns in several and distant regions and the reproduction of local variations and arrangements certainly implies that these decorative styles were fully appreciated by the communities that produced and used them, also testifying to the existence of specific meanings and of some common and shared taste.[84] Nonetheless, the fact that the decorations here analysed are undoubtedly characterized, in most cases, by very modest, simple and similar patterns seems not to imply any attempt at social distinction or identification. Rather, their development probably derives by processes of imitation, emulation and mutual influence within the framework of the complex and entangled set of cultural relationships that marks this period.

Two final further aspects of the Late Bronze Age painted pottery tradition of the Upper Euphrates region deserve a final consideration. On the one hand, the above-described decorations reflect aesthetic and stylistic logics, and on the other they are made for more practical and functional purposes. Drip marks represent a typical local decoration of Arslantepe that does not show any similarities within the region but resembles comparable patterns attested in the Upper Tigris area. Undoubtedly, they were not made to be stylistically appreciated, as testified by their rough and random style and their constant association with large storage forms. Their production did not show any specific aesthetic value and was probably only done with the intention of visually identifying the exact content of the vessels. Geometric paintings and decorative slips, on the contrary, were clearly realized with the purpose of respecting a certain standard of beauty. Their association with small or medium-sized jars as well as bowls attests that they were mainly used for serving and consuming food. Their geographical distribution and spread certainly also reflect the degree of visibility that the vessels bearing these decorations were subject to, confirming the phenomenon of patterns shared among sites and regions.

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[84] On these topics, see Feldman 2014, 47–51 and Rice 2015, 392–410 on art and pottery styles respectively.

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Archaeometric and Technological Investigations of the Late Bronze Age Painted Pottery from Arslantepe (Malatya, Eastern Türkiye)

Pamela Fragnoli and Alexandra S. Rodler

Abstract

We investigated Late Bronze Age painted pottery (1700–1200 BC) from Arslantepe in the Malatya plain (Eastern Anatolia) through a multi-analytical approach combining technological macroscopic observations with petrographic, geochemical and micro-structural methods. Our results evidence a strong continuity with the painted wares of the Middle Bronze Age in terms of raw materials, paste recipes, forming techniques and painting procedures. Unlike the coeval unpainted pottery, the Late Bronze Age painted ceramics exhibit standardised paste recipes that relate to distinct local production circuits.

Keywords

Hittite period, Arslantepe, painted pottery, ceramic technology, archaeometric analyses

Özet

Bu makalede, Malatya ovasında (Doğu Anadolu) yer alan Arslantepe yerleşimi Geç Tunç Çağı boya bezemeli seramiği (M.Ö. 1700–1200), gözle görülebilen ve görülemeyen ölçekteki çeşitli analitik yöntemler aracılığı ile incelenmektedir. Ayrıca, seramikler mineralojik ve jeokimyasal bileşenleri açısında da değerlendirilmektedir. Elde edilen sonuçlara göre, boya bezemeli seramikler, kullanılan ham madde, kil bileşenleri, şekillendirme yöntemleri ve boya bezeme açısından, Orta Tunç Döneminden itibaren kuvvetli bir devamlılık göstermektedir. Boyasız yalın mal gruplarının aksine, Geç Tunç Çağı boyalı seramiği, yakın çevreyle belirgin bir şekilde ilişkilendirilen standart bir mal grubundan üretilmiştir.

Anhtar Kelimeler

Hitit dönemi, Arslantepe, boyalı seramik, seramik teknolojisi, arkeometrik analizler

Introduction

Arslantepe is a multi-layered settlement uninterruptedly occupied from the Late Chalcolithic to the Byzantine times and located in the Malatya plain in South-Eastern Anatolia about 10 km south of the left bank of the Euphrates river. The Late Bronze Age is subdivided into three main phases corresponding with periods VB1 (Late Bronze Age 1A, 1700–1600 BC), VB2 (Late Bronze Age 1B, 1600–1400 BC) and IV (Late Bronze Age 2, 1400–1200 BC) of the site sequence. At Arslantepe the Late Bronze Age shows an increasing influence of the Hittite kingdom from Central Anatolia tangible in both the architecture and the material culture.[1] However,

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[1] Manuelli 2017, 147–149.

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 233–247

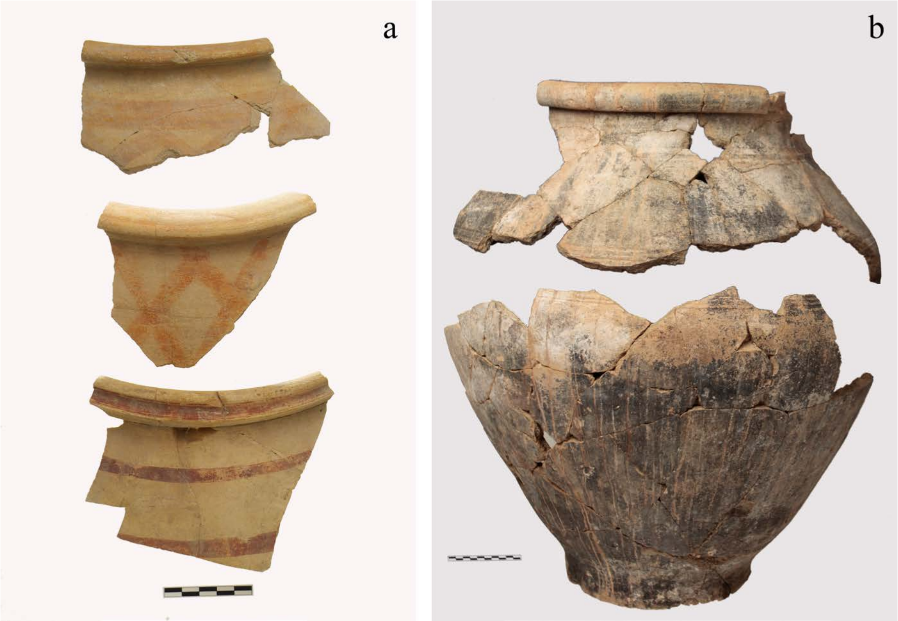

Figure 1: *Late Bronze Age vessels with painted geometric (a) and drip pattern (b).*

Macro-fabrics	Short description	Vessel shapes and decorations
C1	medium-fine dense gritty	jars and bowls with geometric painted patterns
C2	medium gritty	jars and bowls with geometric painted patterns
D2	medium-fine dense sandy	jars and bowls with geometric painted patterns
E1	coarse gritty chaff	large containers with drip pattern
E2	coarse chaff	large containers with drip pattern

Table 1: *Late Bronze Age macroscopic fabrics and related painted patterns and vessel shapes. Gritty refer to coarse and angular inclusions, sandy to finer and sub-rounded ones.*

the tradition of painted pottery, which maximum accounts for 11.8% of the Late Bronze Age pottery finds at Arslantepe,[2] had almost vanished in the core area of the Hittite world.[3]

Among the Late Bronze Age painted decoration we distinguish, on the one hand, red-brownish to purple bands of different thickness forming quite simple geometric patterns (**Figure 1.a**) and, on the other hand, thick series of pale red irregular traces that drip down along the vessel profile (**Figure 1.b**).[4] The geometric patterns are associated with small to medium-sized jars or bowls; they belong to a tradition shared with the whole Upper Euphrates region and inherited from the Middle Bronze Age.[5] By contrast, the drip pattern occurs on large storage jars and are typical of the Late Bronze Age repertoire of Arslantepe. The Late Bronze Age painted wares from Arslantepe have been classified into five different macroscopic fabrics based on the type (e.g. sandy, gritty, chaff), size and amount of temper and, to a lesser degree, based on the colour of ceramic pastes and surface finishing procedures.[6] The description of fabrics and their correlation with the different painted patterns are reported in **Table 1**.

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[2] For the percentage bias of the painted material see the contribution presented in this volume by F. Manuelli.

[3] Manuelli 2013, 378–379.

[4] Sherds with surfaces entirely covered with a coloured layer of clay slip have been so far not analysed archaeometrically.

[5] Manuelli 2013, 390–391; Di Nocera 1998, 86–94.

[6] Manuelli 2013, 82–88.

Samples	Vessel shape and decoration	Phase
329/15	necked pithos with strangled neck, rounded thickened-out rim and drip pattern (fabric E1)	LBA1A
338/15	necked pithos with strangled neck, rounded thickened-out rim and drip pattern (fabric E1)	LBA1B
339/15	necked pithos with strangled neck, rounded thickened-out rim and drip pattern (fabric E2)	LBA2
342/15	neckless pithos with rounded thickened-out rim and drip pattern (fabric E2)	LBA1A
346/15	necked small-sized jar with strangled neck, rounded thickened-out rim and globular belly painted with red colored geometric patterns (fabric C2)	LBA1B
328/17	necked pithos with strangled neck, rounded thickened-out rim and drip pattern (fabric E1)	LBA1A
337/17	necked pithos with strangled neck, rounded thickened-out rim and drip pattern (fabric E2)	LBA2
340/17	jar painted with red colored geometric patterns (fabric C2)	LBA1A
341/17	high necked large-sized jar painted with red colored geometric patterns (fabric D2)	LBA1A
344/17	necked small-sized jar painted with red colored geometric patterns (fabric D2)	LBA2
345/17	jar painted with red colored geometric patterns (fabric D2)	LBA2
346/17	jar painted with red colored geometric patterns (fabric C1)	LBA1A
347/17	jar painted with red colored geometric patterns (fabric D2)	LBA1A
348/17	jar painted with red colored geometric patterns (fabric D2)	LBA2
349/17	bowl painted with red colored geometric patterns (fabric C2)	LBA2

Table 2: *Sample number, description and chronological phase of the analysed painted wares.*

In this paper we mainly aim at identifying the production sites and modes of the Late Bronze Age painted ceramics from Arslantepe and their continuity from the previous phases. To this end, we carried out technological macroscopic observations on approximately 200 items with well-preserved profiles as well as thin-section petrography and bulk geochemical analysis through X-ray fluorescence wavelength dispersive spectroscopy on 15 selected samples (**Table 2**). On the painted decorations we also performed analyses by means of a portable X-ray spectrometer and scanning electron microscope.

Macroscopic observations of forming and painting procedures

There is a limited repertoire of geometric patterns executed without great care. For instance, brushstrokes are still visible, lines rarely run straight, have irregular thicknesses and often protrude beyond the borders of the general pattern (**Figure 2**). These painting procedures can be traced back to the Middle Bronze Age. In the previous Early Bronze Age 2–3 painted patterns were instead realised through more precise gestures and with raw materials of higher quality. The observation of the forming procedures further corroborates these affinities and differences: the painted vessels of the Early Bronze Age 2–3 were realised without the use of rotational kinetic energy, presumably by stretching coils previously beaten; the selected painted specimens of the Middle and Late Bronze Age are typically characterised by internal grooves and striations, undulated profiles, discontinuities in cross sections (**Figure 3**), features that rather point to a wheel-coiling technique.[7] The colour distribution in cross-sections indicates well-controlled and homogeneous oxidising firing conditions.

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[7] Choleva 2012; Courty and Roux 1995; Roux 2017.

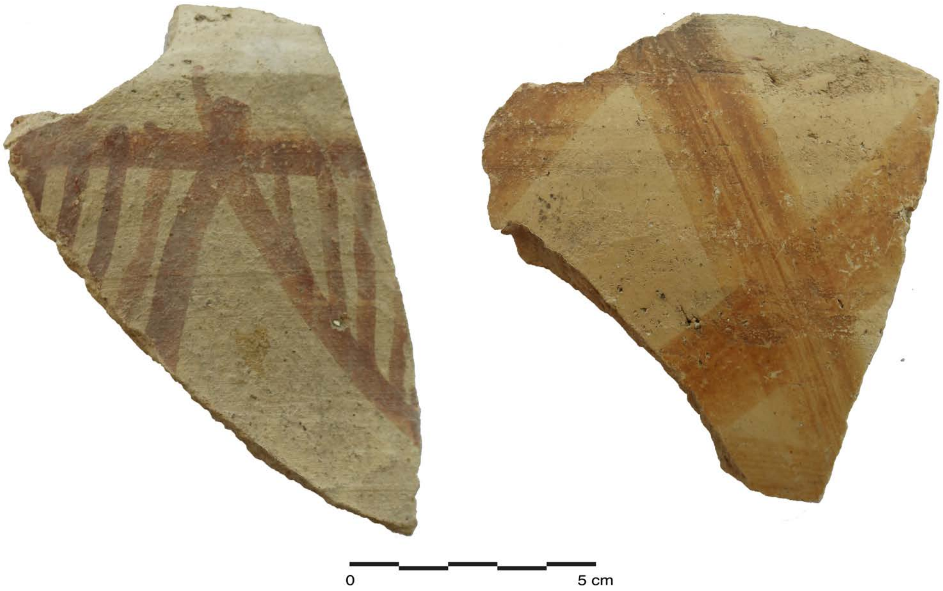

Figure 2: *Geometric paintings characterised by irregular lines, asymmetric patterns and visible brushstrokes.*

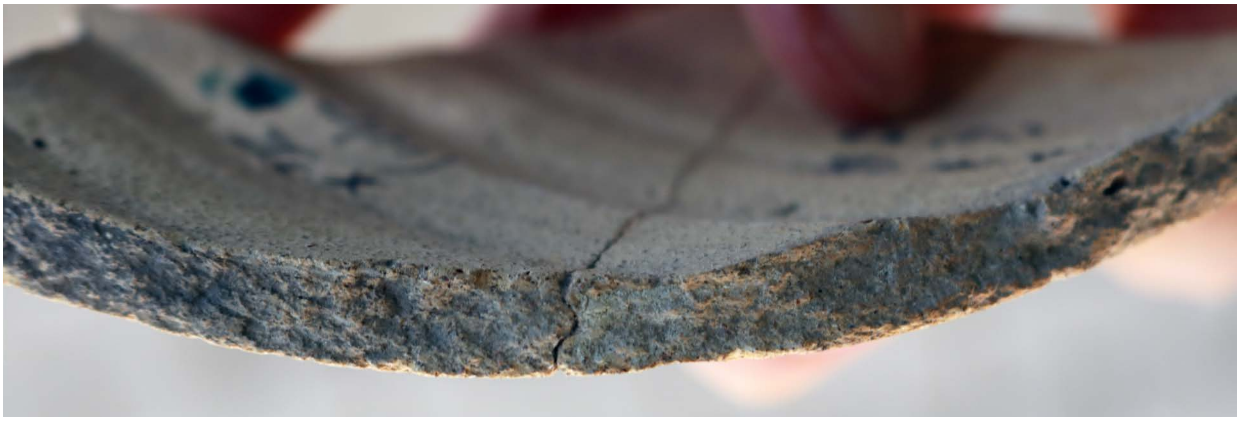

Figure 3: *Irregular profiles and discontinuities in cross-sections typical of the geometric painted specimens.*

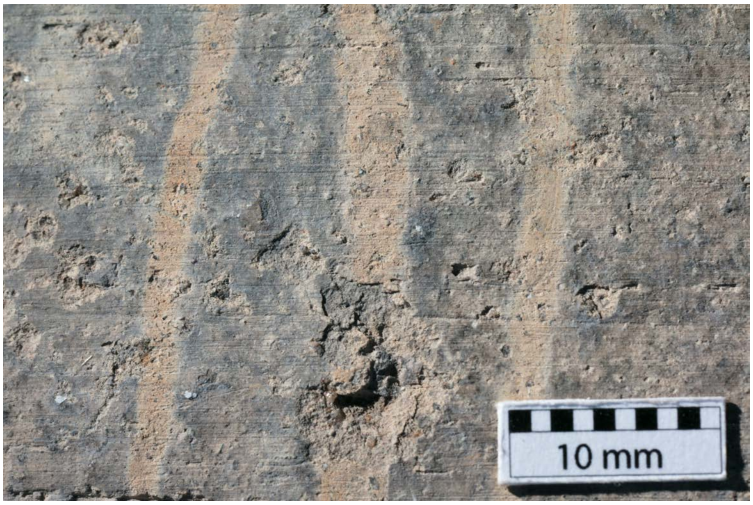

Figure 4: *Typical drip marks (photo R. Ceccacci, Archive MAIAO).*

The drip marks are light red-coloured on the rim but lighten along the vessel profile leaving a reserved pattern. They appear on a patchy and thin black background, which does not obliterate the underlying finishing traces (**Figure 4**). The technique used appears to be consistent with the 'smoke' painting rather than the reserved slip. As documented in ethnographic studies and artistic reproductions, similar patterns can be obtained with an initial firing session under oxidising conditions, the application of liquid wax according to a vertical pattern of lines, and a second firing at the end of which the incandescent surfaces of the vessels are put in contact with organic fuel.[8] This creates smoke that turns the whole surface of the pot black except for the wax lines, which are not affected by the reducing atmospheres and keep the plain colour given by previous oxidising firing. The double firing session is reflected in the colour distribution in cross-sections, dominated by a large black core between two narrow reddish bands.

Thin-section petrography

The thin sections are grouped into two main petro-fabrics that are compatible with sources located within a 6 km radius east from the site.[9] The distinguishing and predominating feature of the first group (**Figure 5.a–b**) consists of trachytic to rhyolitic volcanic rocks, which show sub-rounded to sub-angular shapes and occur both in the finer and coarser fraction (up to 1.7 mm). The temper fraction amounts to 15–20%, shows a bimodal to hiatal grain-size distribution, and, besides the prevalence of volcanic rocks, is composed of plagioclases, quartzes and micritic calcites to a proportion of 5–15% as well as 0–5% hornblendes, biotites and intrusive gabbroic rocks. Temper and pores are moderately aligned and the clay matrix is optically inactive.

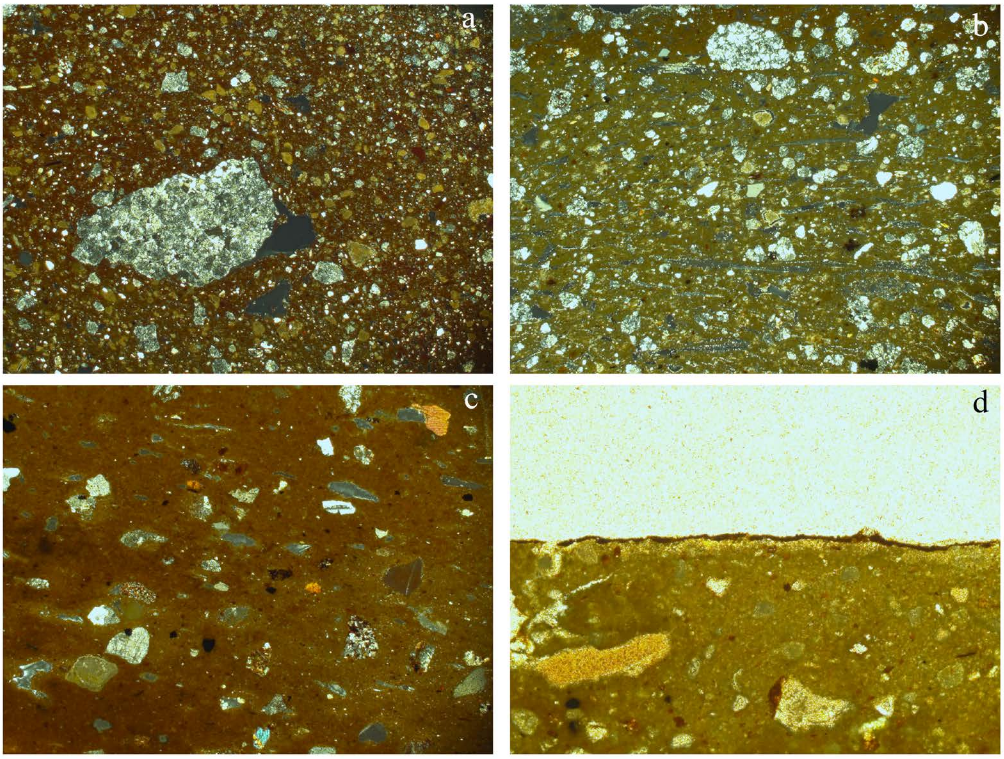

Figure 5: *Microphotographs representative of the petro-groups 1a (a), 1b (b), 2 (c) (crossed nicol) and of the decoration layer (d) occurring on the surfaces of geometric painted layers (plane polarised light). The field of view is 4.5 mm wide.*

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[8] For ethnographic studies see Roux 2017, 137–138; for artistic reproduction: personal communication of the potter E. Liebenberg Fritz (Vancouver) (Instagram account: nomad_soul67).

[9] Fragnoli and Palmieri 2017.

The first group is subdivided into two subgroups based on the presence (**Figure 5.a**) or absence (**Figure 5.b**) of vegetal temper. The samples 340/17, 346/15, 346/17 and 349/17, i.e. painted ceramics of the C1 and C2 wares dating to the Late Bronze Age 1 and 2, are almost totally lacking vegetal temper. The clay matrix is silty, has a granular structure and is reddish to red-brownish in colour. By contrast, the vegetal temper, in the forms of voids or carbonised remains, predominates in samples 339/15, 328/17, 337/17, 338/15 and 329/15, belonging to the Late Bronze Age 1–2 painted ceramics of the E1 and E2 wares. The matrix is brown to reddish-brown at the margins, black in the core and underwent an initial vitrification.

The second petro-group (**Figure 5.c**) includes the samples 341/17, 344/17, 347/17, 348/17 and 345/17, which are related to the Late Bronze Age 1–2 painted sherds of the ware D2. The ceramic pastes are finer than those of petro-group 1 and characterised by sub-rounded inclusions up to 1 mm, with a unimodal-bimodal grain-size distribution and incidence up to 10%. Ceramic pastes are dominated by (50–70%) volcanic andesitic to basaltic rocks as well as by micritic calcite, quartz, plagioclases and altered mafic minerals, while biotites (altered by firing), aggregates of quartz and feldspars and hornblendes rarely occur. Matrix, inclusions and voids are strongly aligned with evident shear stresses. The clay matrix is brown-reddish coloured, optically inactive and slightly vitrified.

The samples of the wares C and D often exhibit a very thin irregular and isotropic brown-reddish painted layer that completely sticks on the pottery body and penetrates its surface micro-porosity (**Figure 5.d**). In contrast, no distinctive clay slipping layer has been observed among the E ware, which further allows us to rule out the possibility that the reserved slip technique was used to obtain the drip pattern. Furthermore, the sample 342/15 related to the ware E2 could not be classified into any petro-group and thus represents a petro-loner. The ceramic paste is dominated by vegetal inclusions in both fine and coarse fraction (up to 1.5 mm), while other inclusions, such as quartz, calcite, hornblendes, biotites, limestones and quartz-schists, occur only in the fine fraction. The temper accounts for 15% and is poorly sorted and randomly distributed within the clay matrix. This latter is brown to beige coloured, slightly active to active with a crystallitic b-fabric.

To sum up, the petrographic analyses evidence two well-established paste recipes that indicate the exploitation of different units within the volcanic and intrusive complexes located east of the site.[10] These recipes correspond to distinct wares within the Late Bronze Age painted production: on the one hand, C1, C2, E1 and E2, on the other, D2. Both recipes were extensively used in the previous periods of Arslantepe.[11] Particularly close affinities connect the Late Bronze Age ware D2 with the painted vessels from the Early Bronze Age 2 onwards. On a synchronic scale, the Late Bronze Age unpainted specimens differ from the painted ones in the use of a wide spectrum of different recipes independently of the vessel shapes.

The two Late Bronze Age petrographic groups differ not only in the type of rocks and minerals but also in the paste preparation, forming and firing modes. In comparison with the class D, the wares C and E suggest a stronger tempering action, a lower incidence of the rotational kinetic energy created by the use of rotating devices and a lower equivalent firing temperature (800°C–850°C vs. 900°C–1000°C, corresponding to the alteration temperature of clay minerals and biotite respectively).

Though the painted sherds belonging to the wares C and E were produced with the same kind of grit temper, they differ in the use of vegetal temper and in the firing procedures. The ware C was not vegetal tempered and underwent oxidising firing atmospheres. The ware E was vegetal tempered, fired under both oxidising and reducing conditions (first and second firing sessions), possibly at slightly higher temperatures (incipient vitrifying process is visible) but for shorter times (black core and conserved organic temper).

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[10] Fragnoli and Palmieri 2017.

[11] Fragnoli and Palmieri 2017.

X-Ray fluorescence wavelength dispersive bulk geochemistry

The concentrations of all major elements and 14 trace elements (**Table 3**) were determined using a wavelength dispersive X-ray fluorescence spectrometer (PANnalytical AXIOS) at the German Research Centre for Geosciences of the Helmholtz Centre Potsdam. Major elements were normalised to a constant sum of 100%. The samples were preliminarily prepared at the Archea Laboratory in Warsaw. After removing contaminated surfaces with a corundum polishing machine, they were washed with distilled water and ultrasounds, and stored first in a drying oven for 24 hours and then in a desiccator. They were then ground in an agate mill (Fritsch Pulverisette Null) and allowed to dry again. A 1.5–2 g powder of each sample was ignited at 900°C, melted with a lithium-borate mixture (Merck Spectromelt A12), and cast into small discs measuring 32 mm in diameter.

Sample	**329/15**	**336/15**	**338/15**	**339/15**	**342/15**	**344/15**	**346/17**	**348/17**
Vessel shape and decoration	large container with slipping decorations (fabric E1)	high-necked bottle	large container with slipping decorations (fabric E1)	large container with slipping decorations (fabric E2)	large container with slipping decorations (fabric E2)	shallow bowl	painted with red colored geometric patterns (fabric C2)	painted with red colored geometric patterns (fabric D2)
Phase	LBA1A	LBA1A	LBA1B	LBA2	LBA1A	LBA2	LBA1A	LBA2
SiO_2	57.42	44.61	56.31	55.58	48.08	47.77	52.94	49.68
TiO_2	0.48	0.60	0.55	0.53	0.68	0.61	0.63	0.58
Al_2O_3	12.76	10.01	12.93	12.75	11.86	11.57	13.06	11.24
Fe_2O_3	4.29	5.49	4.78	4.74	6.09	7.14	7.05	7.09
MnO	0.1	0.09	0.07	0.11	0.11	0.11	0.13	0.1
MgO	3.05	5.9	3.36	3.24	4.51	8.37	6.86	8.13
CaO	16.48	28.79	17.59	18.5	23.75	20.06	15.17	19.11
Na_2O	1.64	0.84	1.28	1.28	0.76	1.47	1.23	1.3
K_2O	3.24	3.28	2.9	2.98	3.87	2.45	2.61	2.49
P_2O_5	0.54	0.38	0.22	0.28	0.28	0.45	0.32	0.27
V	61	108	86	69	107	108	112	125
Cr	240	490	264	266	442	500	365	495
Ni	132	262	127	139	223	366	277	394
(Cu)	10	17	11	20	49	54	94	43
Zn	84	81	66	63	88	93	104	105
Rb	84	49	89	84	58	44	46	54
Sr	367	445	392	382	458	367	264	551
(Y)	21	21	21	18	25	12	14	18
Zr	136	110	142	130	155	65	60	111
(Nb)	15	14	15	16	16	16	13	13
Ba	528	277	431	493	373	544	307	178
(La)	25	8	42	34	16	/	/	12
(Ce)	50	31	34	54	27	/	46	35
(Pb)	20	8	17	16	13	11	/	8

Table 3: *Major and trace element concentrations of the analysed ceramic samples. Major elements are expressed in wt.%, trace elements in ppm.*

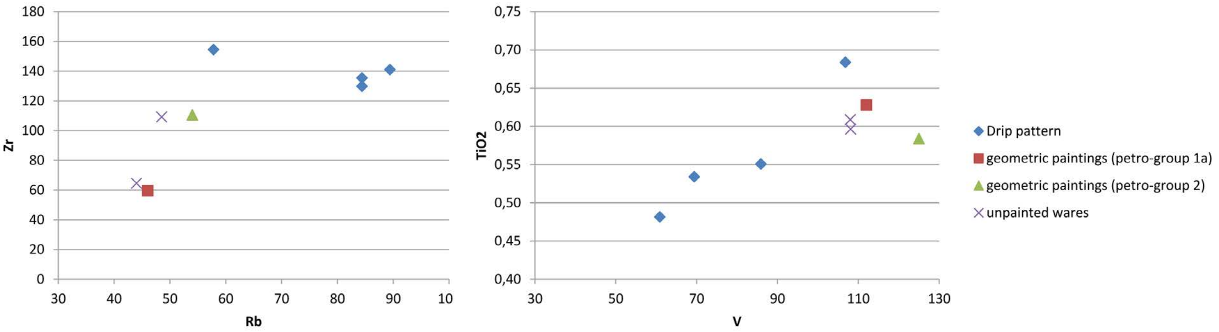

Figure 6: *Binary plots evidencing dissimilarities between geometric painted vessels and large containers with drip pattern and affinities among geometric painted vessels of different macro-fabrics and petro-groups.*

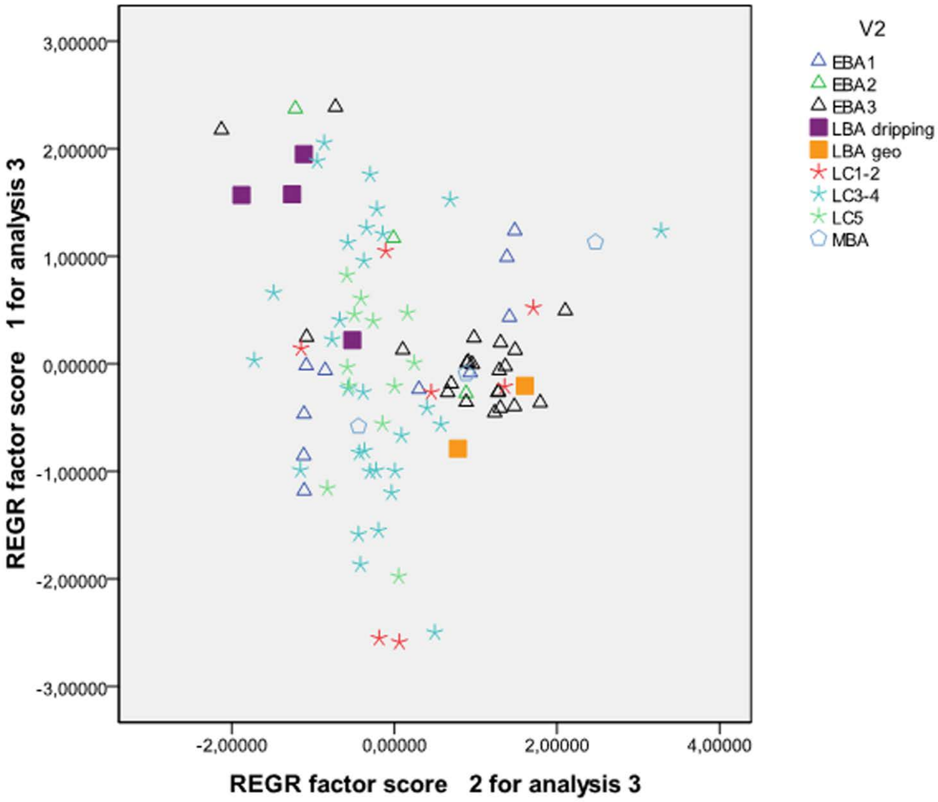

Figure 7: *Scatter plot relating Factor 1 (30.5%: Al$_2$O$_3$, SiO$_2$, -MgO, Zr, TiO$_2$, -Ni, Rb, Na$_2$O) and 2 (21.6%: Fe$_2$O$_3$, V, -Sr, Ni, MgO) of the Principal Component Analysis. Late Bronze Age painted specimens are considered together with the assemblages of the previous Late Chalcolithic-Middle Bronze Age phases.*

Most of the binary plots (**Figure 6**) evidence clear affinities between the analysed geometric painted samples, although they show different macro-fabrics (C1 and D2) and petro-groups (1a and 2). Coeval unpainted vessels are close to these samples even though they present slightly lower SiO$_2$, Fe$_2$O$_3$, V, Rb and Ni contents. The vessels with dripping decorations cluster instead in a separated group characterised by higher Rb and Zr and lower Fe$_2$O$_3$, TiO$_2$, Mn and V concentrations, i.e. by lower mafic and higher felsic affinities. Thus, even though the painted sherds belonging to the ware C1 and the vessels with drip pattern share the same type of inorganic temper, namely trachytic to rhyolitic volcanic rocks,

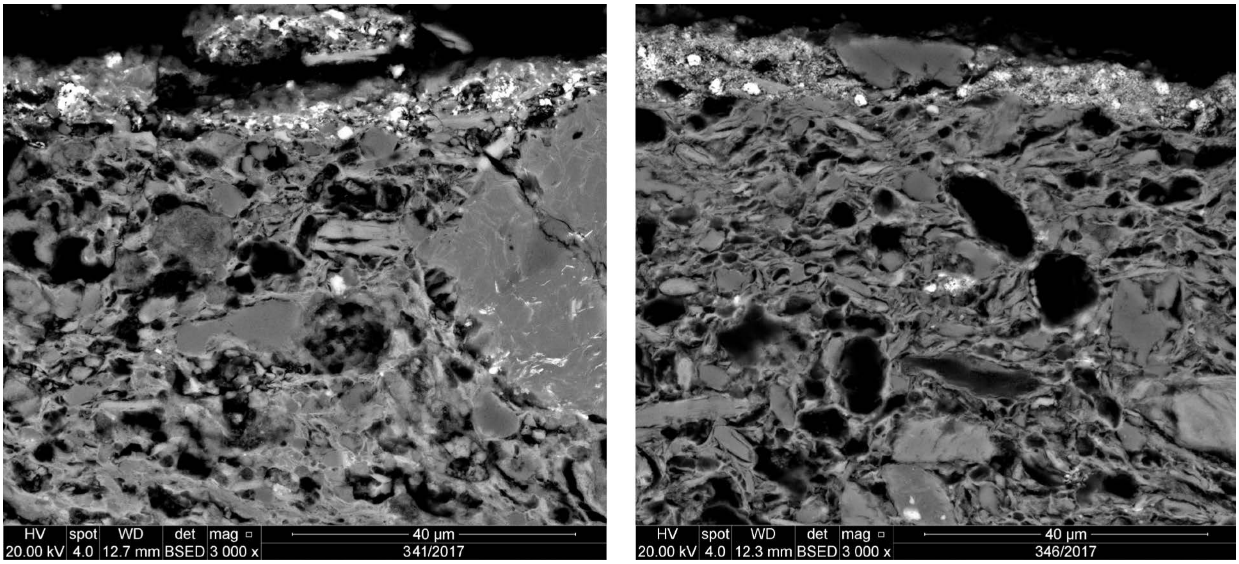
HV spot WD det mag
20.00 kV 4.0 12.7 mm BSED 3 000 x
40 µm
341/2017
HV spot WD det mag
20.00 kV 4.0 12.3 mm BSED 3 000 x
40 µm
346/2017

Figure 8: *Backscattered electron image of irregular, bright layers enriched in Fe-Ti oxides indicative of a different composition between surface paint layer and underlying ceramic bodies for samples 341/17 (left) and 346/17 (right).*

they exhibit a different geochemical fingerprint that might suggest the exploitation of different clay beds. The only exception is the petrographic loner with drip marks (sample 342/15), which has greater similarities with the unpainted and geometric painted specimens.

A principal component analysis was performed by also including the chemical data of the previous periods in order to better assess cases of diachronic continuity. For the purpose of calculation, the trace elements below the detection limit (Cu, Y, Nb, La, Ce, Pb) were removed, the raw chemical values were summed to a constant of 100%, transformed logarithmically to base 10 and standardised in order to give all elements approximately equal weight.[12] CaO, K_2O and P_2O_5 were not considered in the statistical elaborations as they are easily influenced by post-depositional changes.[13]

Factors 1 and 2 account for 30.5% and 21.6% of the variance based on the concentrations of Al_2O_3, SiO_2, -MgO, Zr, TiO_2, -Ni, Rb, Na_2O and Fe_2O_3, V, -Sr, Ni, MgO, respectively. In the plot relating both factors (**Figure 7**) the Late Bronze Age painted pots fall into three distinct groups. The vessels with geometric patterns mainly cluster along the painted wares of previous periods (factor 1 negative, factor 2 positive), i.e. from the Early Bronze Age 2 onwards, confirming the continuity observed at a petrographic level. The petrographic loner with drip marks (sample 342/15) plots close to different Late Chalcolithic wares and shapes (factor 1 and 2 neutral), while the other vessels with this type of decoration show affinities with Early Bronze Age 2–3 handmade burnished ware and Late Chalcolithic 3–4 wheel-finished large containers (factor 1 positive, factor 2 negative).

Scanning electron microscopy and handheld energy dispersive X-ray fluorescence on red-coloured patterns

The surface area and characteristics of polished cross sections of geometric painted vessels were analysed by scanning electron microscopy (SEM) without coating and at low vacuum using a Quanta FEG 250/FEI instrument at the Institute of Art and Technology, Conservation Sciences, University of Applied Arts Vienna, Austria. These analyses include elemental dot mapping by energy-dispersive

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[12] Baxter 1994; 1995; 2003; 2004; Glascock 1992.

[13] Schwedt *et al.* 2004.

X-ray spectroscopy together with the use of the SEM instrument. Scanning electron microscopy utilises an electron beam that scans across a sample's surface and eventually emits, amongst other signals, X-rays that facilitate the qualitative and/or quantitative analysis of the elemental composition and distribution by energy-dispersive X-ray spectroscopy (EDS).

The reddish geometric patterns mostly appear as 3 to 13 µm thick irregular layers enriched in Fe-Ti oxides, i.e. brighter in backscattered electron images compared to the underlying ceramic body (**Figures 8–9**). In the sample 345/17 (**Figure 9**) an additional 16 µm thick irregular layer with a fine oriented microstructure occurs between the painted surface and the ceramic body. Thus, this sample underwent a more thorough surface finishing (smoothing or wet smoothing?) before the application of the painted decoration. Once again, for the samples with drip marks we could not detect any layer of different composition and/or microstructure, which further corroborates the technique of the 'smoke painting' (**Figure 10**).

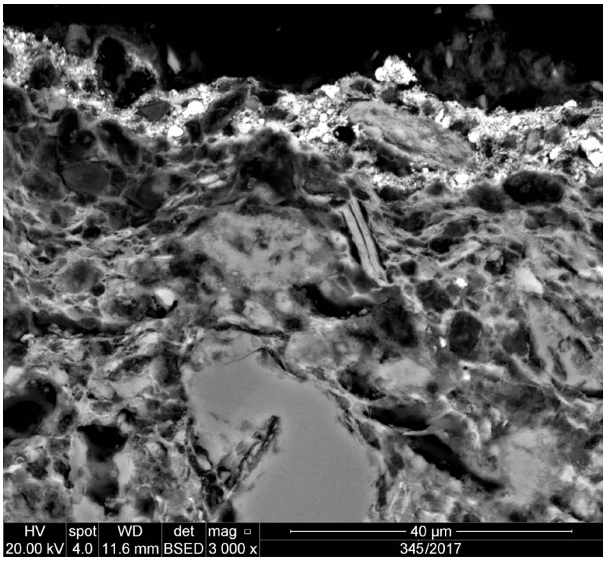
HV spot WD det mag □ 40 µm
20.00 kV 4.0 11.6 mm BSED 3 000 x 345/2017

Figure 9: *Backscattered electron image of irregular, bright layers enriched in Fe-Ti oxides indicative of a different composition between surface paint layer and underlying ceramic body as well as a fine oriented microstructure between the painted surface and the ceramic body (sample 345/17).*

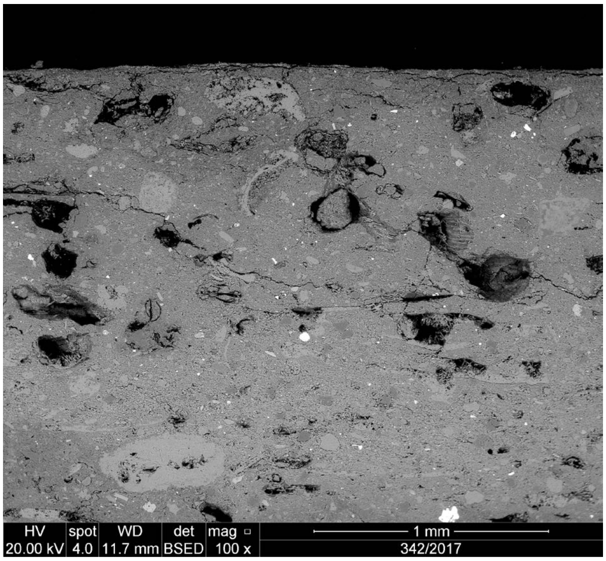
HV spot WD det mag □ 1 mm
20.00 kV 4.0 11.7 mm BSED 100 x 342/2017

Figure 10: *No layer of different composition and/or microstructure detected in the backscatter electron image (sample 342/15).*

However, none of the studied samples allowed us to distinguish an external layer with a binder or a microstructure different from the silicate minerals of the underlying ceramic body. This could mean that the 'paint' composition and microstructure of each analysed section was not significantly different to that of the clay body. Nevertheless, complementary analytical and physicochemical methodologies, such as Raman spectroscopy, inductively coupled plasma (ICP) mass spectrometry (MS) and/or X-ray diffractometry (XRD), are necessary to allow for exhaustive knowledge of all the components present in the different phases of the studied pottery samples.[14] These would be the methods of choice for obtaining more detailed elemental maps. Furthermore, even if this is not one of the central aims of this paper, the degree of vitrification of the ceramic matrix under the SEM provides further information on firing temperatures.[15] Among the geometric painted samples, 341/15 and 342/15 stand out for their higher firing temperatures between 850°C and 1050°C.

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[14] Iriarte *et al.* 2008; Pradell *et al.* 2006.

[15] Maniatis and Tite 1981.

The coloured surfaces were also analysed with the handheld energy dispersive X-ray fluorescence (HH-EDXRF) spectrometer Olympus InnovX Delta Premium 6000 (Rh anode, 8-40 keV, Si-drift detector, 4W X-ray tube, current of 5-200 µA). This type of analysis is non-destructive and a powerful tool for qualitative and semi-quantitative investigations of cultural heritage materials.[16] Prior to sample analyses, this instrument was routinely calibrated with the supplied 'Cal Check (standardisation) Coupon' (316 stainless steel alloy) for the pre-programmed mode 'Soil Analysis' for the default element suite 'Environmental'. The integrated Compton Normalisation algorithm is designed for achieving low Limits of Detection (LOD) and an accuracy of 2–3%. Each sample analysis was performed three times and each time at both 10 and 40 keV for 60 sec. The results were used for calculating the average elemental concentration as well as standard deviation and error. Elements with a concentration below LOD or with a high standard error were not considered.

With a few exceptions, there is no significant difference between the elemental composition of the ceramic body and the surface of the analysed pottery fragments (**Table 4**), both composed of the elements typically occurring in clays. However, the HH-EDXRF analyses of sample surfaces show a correlation between Al and Ti concentrations (r2=0.66, n=8), which is not apparent for ceramic bodies (r2=0.22, n=8). Similarly, Si and Fe concentrations as well as Si and Al concentrations show a stronger correlation for sample surfaces (r2=0.50 and r2=0.98, n=8, respectively). Once again, as for surface finishing procedures and firing temperatures, sample 345/17 differs from other geometric painted vessels, since its surfaces are distinctively poorer in Si, Ca and Al/Ti compared to the ceramic body. The basic similarity of microstructure and elemental composition between the surfaces and the clay body

Sample ID	Measuring Spot	Mg (wt.%)	Al (wt.%)	Si (wt.%)	P (wt.%)	S (wt.%)	K (wt.%)	Ca (wt.%)	Ti (wt.%)	Fe (wt.%)	Zn (wt.%)	As (wt.%)	Al/Ti	Al/Si	Fe/Si
341/17	Surface	2.24	4.37	13.52	0.44	0.19	1.45	19.58	0.29	6.13	0.012	0.008	14.96	0.32	0.45
341/17	Body	3.86	6.32	21.88	0.20	0.20	1.87	18.31	0.38	6.12	0.011	0.001	16.50	0.29	0.28
342/15	Surface	n.d.	0.48	2.32	0.28	10.75	0.67	26.32	0.12	2.54	0.007	0.001	4.00	0.21	1.10
342/15	Body	1.23	5.90	21.36	0.16	0.15	1.72	18.55	0.30	4.03	0.007	0.001	19.41	0.28	0.19
344/17	Surface	3.07	5.17	16.46	0.30	0.20	1.31	16.25	0.25	4.56	0.009	0.001	20.55	0.31	0.28
344/17	Body	3.70	6.76	23.05	0.20	0.15	1.97	16.80	0.33	5.65	0.010	n.d.	20.65	0.29	0.24
345/17	Surface	3.63	3.35	12.86	0.22	0.12	0.87	8.89	0.12	3.41	0.012	0.004	26.99	0.26	0.27
345/17	Body	5.93	5.68	23.24	0.14	0.29	1.54	25.06	0.39	6.26	0.014	0.002	14.54	0.24	0.27
346/17	Surface	3.30	5.73	20.01	0.42	0.21	2.75	9.38	0.38	7.28	0.024	0.003	15.24	0.29	0.36
346/17	Body	3.49	5.95	21.47	0.48	0.23	2.00	12.88	0.35	6.03	0.011	0.001	16.75	0.28	0.28
347/17	Surface	2.41	4.63	15.75	0.59	0.32	1.35	19.01	0.25	5.67	0.011	0.012	18.39	0.29	0.36
347/17	Body	3.81	6.48	22.39	0.28	0.14	2.03	16.40	0.31	5.76	0.010	0.001	20.83	0.29	0.26
348/17	Surface	4.00	6.10	21.54	0.18	0.25	2.33	11.53	0.33	7.06	0.022	0.008	18.67	0.28	0.33
348/17	Body	3.98	5.00	20.45	0.16	0.23	1.71	16.46	0.40	5.82	0.009	0.001	12.62	0.24	0.28
349/17	Surface	n.d.	1.00	3.55	0.24	0.21	0.39	32.48	0.19	5.24	0.008	0.009	5.20	0.28	1.47
349/17	Body	2.66	6.32	22.38	0.17	0.16	1.70	16.81	0.39	4.98	0.009	0.001	16.09	0.28	0.22

Table 4: *HH-EDXRF analyses of sample surfaces and ceramic bodies.*
Notes: n.d. = not detected.

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[16] Scott 2011.

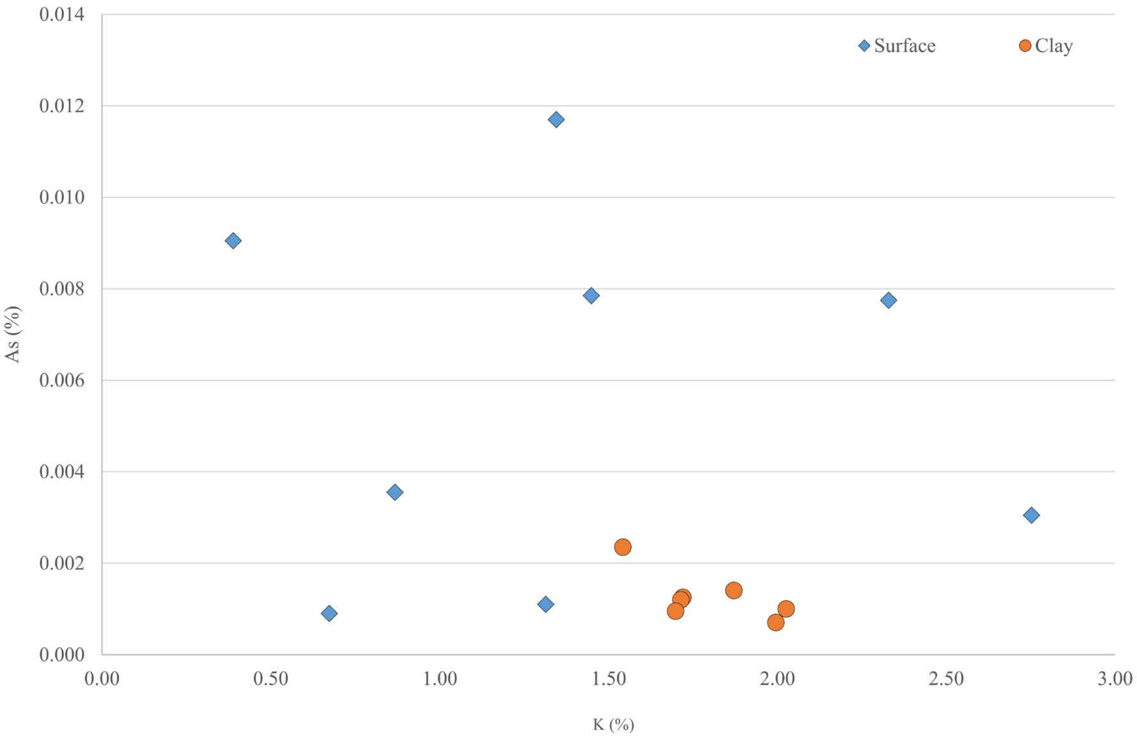

Figure 11: *K and As concentrations (HH-EDXRF; Tab. 4) of sample surfaces (blue) and clay bodies (red).*

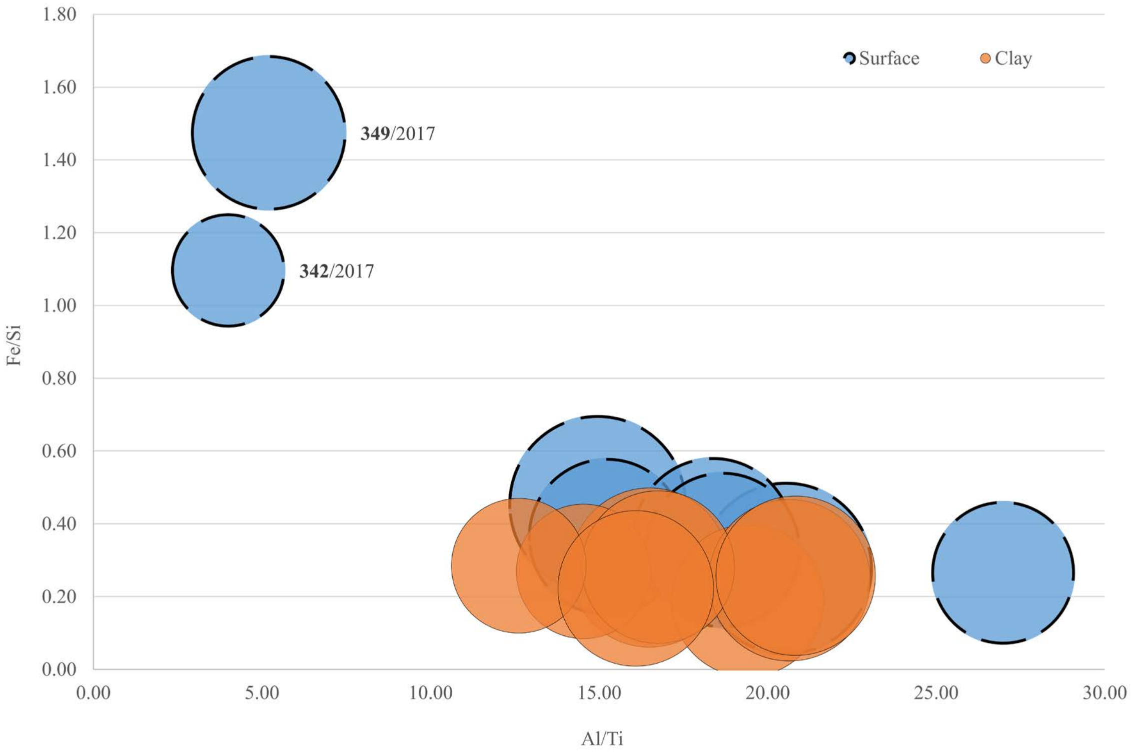

Figure 12: *Sample surface (blue) and clay body (red) Fe/Si vs Al/Ti ratios (Tab. 4); the width of bubbles increases with an increasing Al/Si ratio.*

indicates the use of decorative raw materials resulting from simple refinement of the body-clay (*engobe* technique) rather than from the exploitation of ore sources.

More substantial differences appear in the samples 342/15 and 349/17. Indeed, the Al/Ti ratios of their surfaces (4.60 ± 0.85) are distinctly different compared to the respective ceramic bodies and compared to average sample Al/Ti ratios (excluding these two surface analyses; 19.13 ± 4.41, n=6). In a plot of Fe/Si ratios vs Al/Ti ratios (**Figure 11**), it is apparent that these two samples have a distinctly different surface composition. Furthermore, there were no detectable Mg concentrations for these two surface analyses. These two surface analyses also yield distinctly lower Si concentrations (2.32 and 3.55%) compared to the surfaces of the other samples (**Figure 12**) and compared to average ceramic body Si concentrations (22.03 ± 0.93%, n=8). As opposed to the rest of the samples, the surface elemental composition is not to be interpreted as clay, since 342/15 is mostly composed of Ca and S, 349/17 of Ca and Fe. As for 342/15, the study on Ca and S zoning in industrial bricks made by Gredmaier, Banks and Pearce provides valuable information.[17] A superficial enrichment in Ca and S might result from both the particular firing techniques and the original composition of the clay body. It can be deduced from the bulk geochemistry and thin-section petrography that 342/15 was produced with calcareous clay heavily tempered with vegetal matter, which is composed of C and sulphurs. During the firing process the sulphurs of the organic temper as well as those naturally occurring in the clay migrate in the form of gases towards the vessel surfaces. However, they were not able to completely burn out of the clay body and thus accumulated on the surfaces due to the heavy reduction performed at the end of the firing for the dripping decoration. Moreover, the hypothesised use of organic matter to perform the reduction/smoking should represent a further source of sulphur release.

Discussion

Through the integrated analytical approach described in this paper we could identify clear synchronic and diachronic trends in the production organisation of the Late Bronze Age painted pottery from Arslantepe. The raw materials and paste recipes used for the Late Bronze Age painted production are quite standardised compared to those characterising the coeval unpainted vessels and accord with a thousand-year long local tradition.[18] This evidence also points to a local production of these vessels. Based on the different choices made along the *chaîne opératoire* we could identify distinct circuits of production, namely two for the geometric painted pottery and one for the large containers with drip patterns. These latter do not result either from a painting procedure or from the so-called reserved slip technique but rather were obtained through a double firing session alternating oxidising and reducing atmospheres. Though the geometric painted vessels differ from each other in the paste preparation and possibly firing temperatures, they share common geochemical fingerprints, i.e. raw materials, forming procedures, decoration patterns and techniques, which all strongly recall the painted production of the Middle Bronze Age. This evidence is consistent with typological data that indicate a development of local features from the Middle Bronze Age tradition.[19] These elements of continuity can be traced back even to the Early Bronze Age painted production; however, since the Early Bronze Age a decline in the painting gestures, materials and techniques can be seen. Preliminary analytical results on Late Bronze Age painted surfaces suggest indeed that only a little time and care was devoted to this step of the production process. The surfaces did not undergo specific finishing treatments before being painted and painting materials were obtained just by refining the same clay used for the vessels, despite very widespread ore deposits in the region. Analyses of ceramic pigments are still rarely performed but show a high potential especially when integrated with technical observations on a meso- and macro-scale within a *chaîne opératoire* approach.

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[17] Gredmaier *et al*. 2011.

[18] Fragnoli and Palmieri 2017.

[19] Di Nocera 1998.

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Painted Pottery Traditions of Late Bronze Alalakh

Mara T. Horowitz

Abstract

The painted pottery traditions of Alalakh in the Late Bronze Age reveal much about cultural change, interregional connectivity, and political orientation. The Middle Bronze 'Syro-Cilician' painted tradition abruptly ceases in the transition from Alalakh 7 to 6, ending centuries of stylistic connectivity between Amuq and Cilicia. In its place, a major new stylistic connection forms with the Mitanni heartland in the Khabur. This connection is augmented in the 14th century BC with a local industry in Nuzi Ware, even under Hittite rule. Based on these trends, we can see the material correlates of the known emigration of ethnic Hurrians into the Amuq beginning already in Period 7 as documented in texts and seals. Against this backdrop, there is a thread of primitive geometric decoration painted in shades of red and brown that endures throughout the Late Bronze Age and relates to a local painted Iron Age ware. This paper will explore whether this geometric tradition emerges from the background of Syro-Cilician Ware and what it might reveal about the indigenous populations of Southern Anatolia in the borderlands between the Hittite, Hurrian, and Semitic worlds.

Keywords

Late Bronze Age, Alalakh, Amuq, Painted Simple Ware, borderlands

Özet

Antik Alalakh'ın Genç Tunç Çağı'ndaki boyalı seramik gelenekleri kültürel değişim, bölgeler arası bağlantı ve siyasi yönelime dair pek çok unsuru açığa çıkartmaktadır. Orta Tunç 'Suriye-Kilikya' boyalı seramik geleneği Alalakh 7'den Alalakh 6'ya geçişte aniden kesilmiş olup, Amik ve Kilikya arasında asırlarca devamlılık gösteren biçemsel bağlantı son bulmuştur. Bunun yerine Mitanni'nin Habur'daki merkezi ile yeni ve önemli nitelikte biçemsel bir bağ oluşmuştur. MÖ 14. yüzyılda bu bağlantı, Hitit egemenliği altında bile, Nuzi mallarının yerel endüstrisi vasıtasıyla artış göstermiştir. Bu eğilimlerden hareketle, metin ve mühürler ile de belgelenen, Hurri etnik kökenine sahip bireylerin, 7. Tabaka'da zaten başlamış olan Amik'e malum göçünün maddi kültürdeki izlerini tespit edebilmekteyiz. Bu bağlamda, kırmızı ve kahverenginin tonları kullanılarak gerçekleştirilmiş ilkel geometrik bezemelerden oluşan, tüm Geç Tunç Çağı boyunca varlığını sürdürüp yerel bir boyalı Demir Çağı seramik grubuyla da ilişkilendirilen bir akım da mevcudiyet göstermektedir. Bu bildiri, söz konusu geometrik geleneğin Suriye-Kilikya seramik grubu arka planından hareketle ortaya çıkıp çıkmadığını irdeleyecek; Hitit, Hurri ve Sami dünyaları arasında sınır bölgesinde yaşayan güney Anadolu'nun yerli halkları hakkında neleri ortaya çıkartabileceğini sorgulayacaktır.

Anahtar Kelimeler

Geç Tunç Çağı, Alalakh, Amuk, Düz Basit Boyalı Seramik Grubu, sınır bölgeleri

Late Bronze Age Painted Pottery Traditions (Archaeopress 2022): 248–279

Introduction

The Late Bronze Age (ca. 1600–1200 BC) in the ancient Near East was a time of unprecedented integration, exchange, and imperial growth. While great empires such as Egypt, Ḫatti, and Mitanni have long been studied through the texts and material culture of their core nations, new interest has recently been focused on the intermediate territories of Cilicia, west Syria, and Canaan with respect to how local cultures endured, adapted, and even thrived beneath the overarching structure and exploitation of imperialism. This paper presents ongoing research into that most ordinary and abundant of material culture categories, the pottery, in the ancient city of Alalakh (Tell Atchana). Specifically, the paper examines the traditions of painted pottery that preceded, coexisted with, and survived the Late Bronze Age imperial domination of the Amuq valley.

Tell Atchana is located on the strategic and agriculturally rich Amuq plain near where the Orontes, Afrin, and Kara Su rivers join in what was once a broad shallow lake and marshland (**Figure 1.1**). The locality of Tell Atchana is part of a cluster of settlement sites within a 1.5 km radius that includes periods from the early Neolithic onwards. Natural movement of the Orontes river on this very flat landscape may account for the shifting foci of settlement over time. The Atchana mound was first inhabited beginning sometime in the Amuq J, ca. 2200–2000 BC, to shortly after 1300 BC, when it was mostly abandoned except for the Ishtar Temple.[1] After a gap, there is resettlement in the mid-12th century and sporadically thereafter in the 11th–9th centuries BC.[2] By then, local occupation had mostly shifted 800 m north to Tell Tayinat where Early Bronze Age (ca. 3000–2000 BC) settlement had already created a convenient mound. In addition to the two campaigns of Sir Leonard Woolley in 1936–1939 and 1946–1949 (now Area 1), Tell Atchana has been excavated under the direction of K. Aslıhan Yener since 2000. New areas of the site have been sampled (Areas 1 South, 2, 3 and 4), and offsite locations have been tested via geophysical campaigns and borings, revealing also the presence of a lower town to the west (**Figure 1.2**).[3]

In terms of material culture and Semitic language, Alalakh is on the northwestern edge of the greater Old Syrian culture area.[4] In the Middle Bronze Age II (ca. 1800–1600/1575 BC) the Amorite Kingdom of Yamkhad established a secondgenitur monarchy at Alalakh by at least the 17th century. After the destruction of Yamkhad by Muršili I in the 16th century BC, Alalakh's status is uncertain; it may have been largely independent until the coming of the Hurrian Mitanni Empire sometime in the late 16th or early 15th century BC. Hurrian names already appear among the Northwest Semitic names in tablets from Alalakh's Period 7,[5] the end of the Middle Bronze Age II sequence. By Period 4, ca. 1425–1400 BC, census documents show that the community has a large minority of Hurrians and that Hurrian cultural elements such as the names for social classes have been introduced.[6]

During the dynamic 14th century BC, Hittite names also begin to appear in fragmentary Alalakh Period 3 texts and as of the reign of Šuppiluliuma I, the city came under the control of the Hittite Empire.[7] All the while, trade was flourishing with overseas locations such as Cyprus, beginning in the 16th century BC, and with the Aegean, increasing radically as of the late 15th century. Alalakh's pottery in general, and painted pottery specifically, show the effects of all these interactions, if sometimes in surprising ways. It is important to first establish an interpretive as well as historical framework within which to place the Alalakh material.

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[1] Yener 2013, 12. This paper is not meant to make any statement about the absolute dating of Alalakh, which is still under study. The Middle Chronology is used throughout.

[2] Yener 2013, 20–21; see also Koehl 2017.

[3] Casana and Gansell 2005, Fig. 2.3; Wilkinson 1997, 569–570; Batiuk and Horowitz 2010; Horowitz *et al.* 2020, 94.

[4] Williams and Hassert 1977–1978, 41–42; Mazzoni 2002b, 130; Nigro 2002, 98; Akkermans and Schwartz 2003, 291; Bryce 2014, 25.

[5] Woolley's phasing is indicated with his Roman numeral Levels; revised Yener phasing is in Arabic numerals as Periods. Generally, the two are identical with a few adjustments as indicated. See Yener 2013; Yener *et al.* 2020.

[6] Von Dassow 2008, 70.

[7] Yener *et al.* 2020, 4.

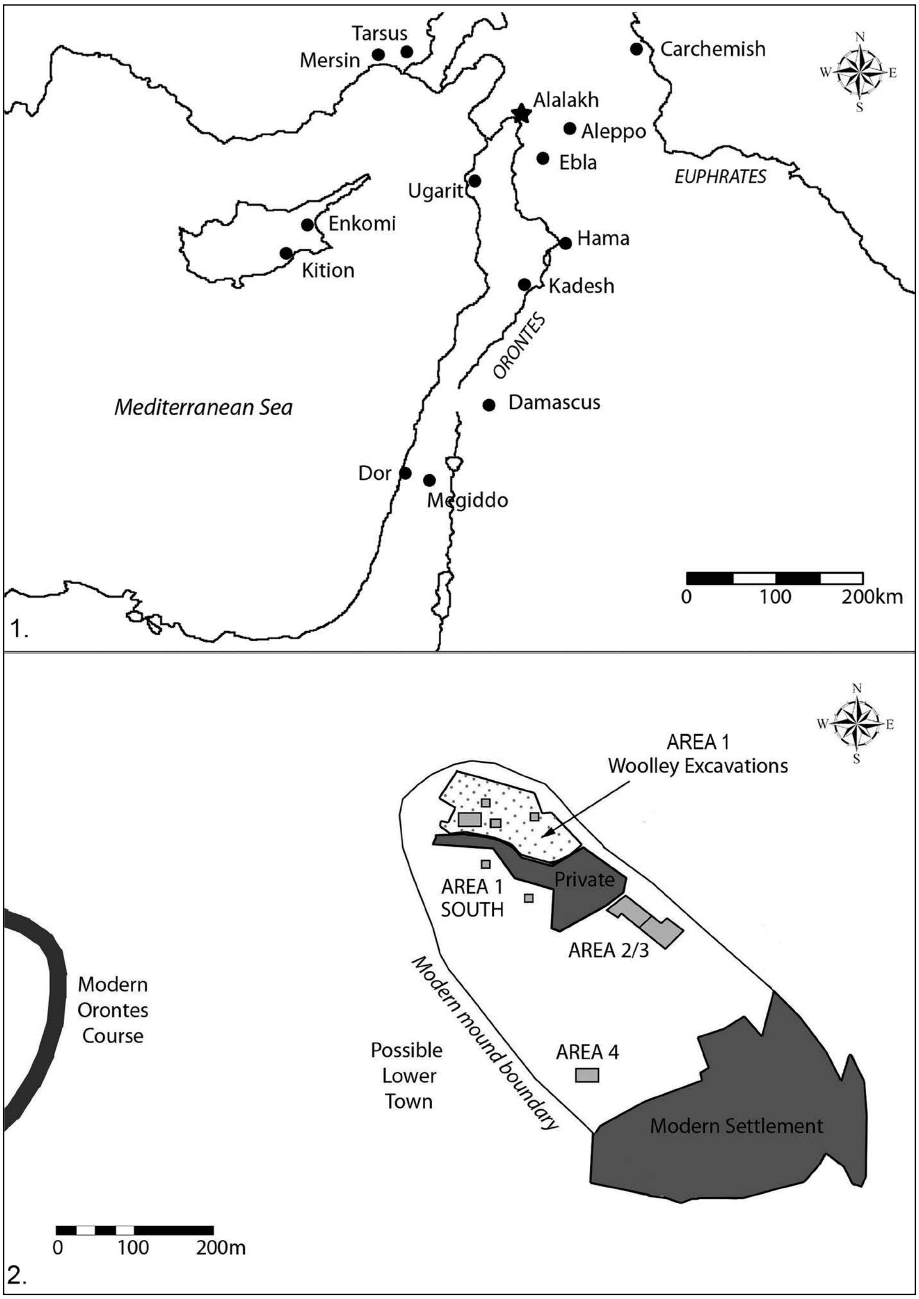
Tarsus
Mersin
Carchemish
N
W
E
S
Alalakh
Aleppo
Ebla
EUPHRATES
Ugarit
Enkomi
Kition
Hama
Kadesh
ORONTES
Mediterranean Sea
Damascus
Dor
Megiddo
0
100
200km
1.
N
W
E
S
AREA 1
Woolley Excavations
AREA 1
SOUTH
Private
AREA 2/3
Modern
Orontes
Course
Modern mound boundary
Possible
Lower
Town
AREA 4
Modern Settlement
0
100
200m
2.

Figure 1: *1) Map of region; 2) Site plan of Tell Atchana (author).*

Working with painted pottery: interpretive frameworks

What can be learned from studying traditions of painted pottery production, distribution, and consumption in the Late Bronze Age borderlands between empires? Painted pottery has long attracted the special interest of archaeologists, collectors, looters, and the public because it is pretty. However, any productive study needs to start with a consideration of the definitions of ‘style’, which are many, to choosing a method for studying painted decorations, which are also many, and to build an interpretive framework for explaining whatever patterns will be found through these analyses.

Simplistic associations of any pottery style with an individual ethnic group (known as pots = people) have long since been abandoned. Beginning in the 1960s, the Social Interaction Theory (or Deetz-Longacre hypothesis) suggested that similarity of pottery style directly correlates to intensity of social interaction among the producers.[8] However, this interaction can take many forms, including familial, tribal, gendered, ethnic, socioeconomic, or commercial ties.[9] Pioneering studies such as that at Broken K Pueblo in the United States proposed that painted pottery designs in excavated household groups represented female kinship clusters where mothers taught their daughters the craft.[10] However, more recent research especially from ethnography has refuted many early attempts to use painted pottery for such analyses. A cohesive definition of 'style' was clearly needed and was proposed by Wobst followed by many others.[11]

As studies of ceramics, style, and interpretation thereof progressed throughout the 1980s and 1990s, the inquiry was widened to include not just decorative method and motif but also technology and other aspects of production.[12] Further use of ethnography in concert with archaeology emphasized the variability in pottery production and upheld some proposed interpretations such as that ceramic styles can identify and maintain social boundaries, though even these purposes can change through time.[13] Studies of ceramic production and style in situations of imperial control have produced interesting insights, including the uses of certain styles as proxies for imperial power which could be important in the consideration of ceramic styles such as Nuzi Ware in the Late Bronze Age Near East.[14]

More recently, productive attempts to move the field of Late Bronze Age Near Eastern pottery forward have focused on the lack of unity in methods, the persistence of simplistic paradigms, and the need for coherent interpretive frameworks.[15] No overarching interpretive framework for ceramic style (including vessel shape and decoration or lack thereof) is currently in use in the field of the Near Eastern Bronze Age beyond basic applications of the Social Interaction Theory. Many historically particular studies have been done on ceramic styles, horizons, and hybridization, but these rely on individual cases and cannot be tested. As a result, the painted pottery of Late Bronze Age Alalakh is presented here with a minimum of interpretation. Given the many basics still unknown at Alalakh, as presented in the next section, anything more than general statements on regional similarities would be premature.

Research questions and historical framework at Late Bronze Age Alalakh

Ceramics studies at Alalakh still have many questions unanswered. The mode of production is largely unknown, though a Late Bronze Age I pottery workshop was excavated and is under study. Within the four-tier social hierarchy recorded at Alalakh in the Level IV (ca. 1450–1400 BC) census records, potters are mentioned only as *ĥupše*, 'free peasants' or *ĥaniaĥĥe*, 'poor' rather than *eĥelle* 'skilled craftsmen' on Level IV census tablets, yet some very fine and elaborate pottery exists that would seem to derive from a specialized craft tradition.[16] We can observe that pottery in the area of the palaces (Areas 1 and 1 South) tends to be much more homogeneous, as though emanating from one school of practice, but we are not yet ready to identify workshops for elite consumption.

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[8] Deetz 1965; Longacre 1964; 1970.

[9] Rice 1987, 254–255.

[10] Deetz 1965; see also Bunzel 1972.

[11] Wobst 1977.

[12] Costin 1998, 3–5.

[13] Hodder 1979, 449–451.

[14] Sinopoli 1998, 161; 2012, 233.

[15] Luciani 2014, 14–17; Philip 2014, 25.

[16] Von Dassow 2008, 138–139.

Given the lack of epigraphic evidence in Alalakh Periods 6–5, and the ongoing analysis of new Period 6–5 excavations, it is not yet possible to reconstruct the sociopolitical situation at Alalakh at that time. It is possible to observe that beyond the palace area in the Late Bronze Age I, pottery is highly variable and generally more conservative, maintaining Middle Bronze Old Syrian vessel forms and plain ware style well into the 15th century BC while the palace area reveals new shapes from the Khabur region.[17] Rather than see an association with ethnic identity, either in the potters or their clients, these trends may simply reflect the growing internationalism of the period and the desire by those in power in Alalakh Periods 6–5 (whoever they were) to participate in region-wide trends, especially those of the rising power of Mitanni to the east. These trends do trickle down to the commoners, though it takes time. By Period 3 in the early 14th century BC, most of the trademark Old Syrian shapes have been modified or abandoned.[18]

In trying to reconstruct the sociopolitical situation in Late Bronze Age Alalakh, it is important to note that in addition to peoples of northwest Semitic origin, peoples of Hurrian origin are crucial to understanding the Syro-Cilician region throughout the Bronze Age and into the Iron Age. Already in the Early Bronze Age they are on the move from the Eastern Anatolian highlands down to Urkesh, and with the fall of the Middle Bronze Age Amorite kingdoms they move throughout Western Syria and founded the Mitanni Kingdom in the Khabur river region. The mechanisms of Hurrian expansion across many centuries are not well understood and commonly take place in anepigraphic peripheries. Even the term 'Hurrians' can be unpacked into an uncertain array of linguistic, ethnic, and political meanings.

Hurrians are thus the so-called elephant in the room of Late Bronze Age Western Syria and Cilicia because they are not discussed. But they must be considered, not because they would have their own pottery style, but because they would naturally form social and economic networks as they moved south and west. They are the link between the Khabur and Amuq that we see very strongly in the Late Bronze Age. By the 14th century BC we can also see the huge infiltration of Hurrian names into the heartland of the Hittite Kingdom. There is no one pottery style to be associated with Hurrians, and Hurrians should probably not be considered one monolithic group. They do however have their culture, their preferences, and their political opinions. It is important to consider how westward-emigrating Hurrians, and their loyalty to the Mitanni Kingdom, may have affected painted pottery industries in Alalakh in the late 14th century BC after the Hittite takeover in Period 3.

The coming of the Hittite Empire in late Period 3 is marked in the pottery corpus by only a handful of new shapes introduced into Simple Ware from North-Central Anatolia.[19] It is important to state that an Anatolian ceramic shape made at Alalakh in our Simple Ware fabric is not 'Drab Ware,' it is the Simple Ware industry adopting a new shape just as a Khabur shape made at Alalakh in the Simple Ware industry is not Khabur Ware. It must also be emphasized that many of the shapes that are called 'Hittite' in Cilicia are already present at Alalakh in the 16th century BC, including v-shaped plates with ring bases and pot-marks. The pot-marks are found only in the Late Bronze Age I Periods 6–4, and not thereafter when the Hittites arrive.[20]

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[17] Horowitz 2015, 167–169.

[18] Horowitz 2015, 170–172.

[19] Horowitz 2015, 170.

[20] Horowitz 2015, 163–164.

The spectrum of what is called 'Hittite' in the Northeastern Mediterranean merely because it is plain and wheel-made is badly in need of revisiting even after numerous conferences and publications on the subject.[21] Cilicia and the Amuq had close ties in the Middle Bronze Age, and we should not think that these ties disappeared overnight. As a predominantly plain ware area, when painted pottery does occur in the Amuq we must assume it had meaning. Whether that meaning was a form of identity signaling related to family or tribe, or resulted from diverged and competitive schools of practice, is not yet certain. In the following section, I present how I have approached typology and the Late Bronze Age ceramic assemblage.

Typology: Amuq M (Late Bronze Age) pottery groups

Based on the intensive study of Tell Atchana pottery initiated in 2007, the following categories have been developed to define wares based on the fundamental technology at work. A primary division exists between the Simple Ware group, characterized by a sand-tempered calcareous fabric and use of the potter's wheel, and other traditions associated with heavy utility work. Those include two distinct cookwares (Mineral Ware and Shellware) and a chaff-tempered Heavy Coarse Ware made with a combination of turning and paddling. Within the Simple Ware group there is the most common type, Plain Simple Ware, comprising by far the bulk of any assemblage at Alalakh, usually about 75–80%.

Simple Ware can also be painted, and three styles are currently defined: Middle Bronze Age Syro-Cilician Ware, Late Bronze Age Banded Ware, and Late Bronze Age Geometric Ware. Simple Ware may also be made in a very fine fabric without visible inclusions, sometimes burnished or with very thin painted or incised horizontal lines, which is designated Fine Simple Ware. From the Simple Ware group also arises a Gray Burnished variant in the Middle Bronze Age II that evolved into Black Impressed Ware in the Late Bronze Age I (ca. 1600/1575–1400 BC). Finally, the same red paint applied to create motifs is sometimes used to cover the entire vessel, resulting in Red Slip Ware. In addition to similar fabrics and forming technology, it is rare to find a shape specific to just one of these Simple Ware subtypes. The only standouts in terms of shapes peculiar to one ware are cups in Gray Burnished/Black Impressed Ware and Fine Simple Ware, both of which are associated with ritual contexts at Alalakh such as burials and the Ishtar temple.

Macroscopic and preliminary chemical and petrographic analysis has tested the idea of plain and painted Simple Ware as categories of the Simple Ware Group. The fabrics of plain and painted examples from the Late Bronze Age II period (1400–1200 BC) were found to be identical.[22] By understanding all of these variants as part of the Simple Ware group, the local production context begins to come into focus for the Middle and Late Bronze Age. New forms and motifs may be introduced to the Simple Ware group, and evolution takes place, all within a fundamental local continuum throughout this time. Intact bioclasts indicate a very low firing temperature, no more than 650 Celsius, which results in reasonably hard pottery due to the calcareous composition of the fabric. Further chemical and petrographic work is ongoing.

Deep history of Amuq Painted Simple Ware

Late Bronze Age painted pottery at Alalakh is the end result of thousands of years of evolution in local practices combined with influences from region-wide trends and innovations. It is helpful to put the Late Bronze Age (Amuq M) painted pottery into context with a brief review. In the Ceramic Neolithic, the first native ceramic production in the Amuq was known for gritty chaff-tempered fabrics and sometimes plain-faced ('Simple Ware') but predominantly dark pattern-burnished surfaces (Dark-Faced Burnished Ware, 79–84% of the sherd count in Amuq A at Tell Judaideh, also found in Mersin and indicating the antiquity of connections between the Amuq and Cilicia).[23] Painted ware appears in Amuq B, with motifs consisting primarily of pendant lines (Brittle Painted Ware, 5–10% of the sherd count).[24] A red slipped variant appears at this early date as well (Coarse Red-slipped Ware).[25] By Amuq C, the influence of the Halafian can be seen in local painted pottery, with 4–9% of the sherd assemblage classified outright as Halafian by Braidwood.[26] A connection between the Amuq and the Khabur and Jezireh regions can thus be detected very early, and will continue to be notable. In Amuq E, 'Ubaid-like Monochrome Painted Ware' is made locally with elaborate motifs along rims or covering most of the vessel.[27] Throughout the Neolithic and Chalcolithic phases, the Amuq assemblages are notable for having plain-faced, incised, burnished, painted, and red-slipped pottery manufactured and used side by side. This situation is the same in the Late Bronze Age.

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[21] Glatz 2012; 2015; Pucci *et al.* in press.

[22] Horowitz 2015, 165.

In the later 4th millennium BC, the Uruk horizon reached the Amuq (and Cilicia) and revolutionized pottery production and style.[28] Amuq G pottery is judged to be wheel-made by Braidwood (Plain Simple Ware, 49–54% of sherd count).[29] From that time on, local pottery was predominantly plain-faced and made of light-colored calcareous fabrics, though painted, incised, burnished, slipped, reserved-slip, and appliqued variants continued to occur. Throughout the Early Bronze Age Amuq phases H-I-J, Simple Ware deriving from the native tradition became partly hand-made with some use of turn-tables. Meanwhile, the distinctive Red-Black Burnished Ware arrives in Amuq H, introducing new forms and decorations.[30] Decorative techniques such as horizontal 'rilling' incision, slip, reserve slip, 'smeared wash', pattern burnish, and paint continue to occur in Simple Ware with a wide variety of motifs including cross-hatching, stars, pendant wavy lines, triangles, and diamonds clearly derived from earlier traditions and ancestral to Middle Bronze Syro-Cilician Ware. A tradition of bold black horizontal stripes also emerges by Amuq J, sometimes embellished with a wavy horizontal line either painted in white or scratched through a thick black horizontal painted band (Sgraffiato Ware).[31]

Use of the fast wheel reemerges by the Amuq K, Middle Bronze Age I, affecting the entire Simple Ware corpus and its variants. Syro-Cilician Painted Ware is a variant of Middle Bronze Age Simple Ware, sometimes called Old Syrian.[32] This widespread horizon is typified by use of the fast wheel, thin walls, high shoulders, ring bases, and hard firing. Middle Bronze Age Syro-Cilician Ware was manufactured across a broad region from the southern edge in the Middle Orontes valley around Hama and extending through Ebla and Aleppo to the Euphrates in the east and over the Amanos mountains to Cilicia in the west.[33] The sociocultural and economic implications of this production and distribution pattern is not yet understood. Clearly the style transcends political and possibly also ethnic boundaries. To the south of Syro-Cilician Ware in the Middle Bronze Age is another horizon, Levantine Painted Ware, and to the east is Khabur Ware. Taken together they form a macro-regional zone with some discernable interaction but distinctive local practices.[34]

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[23] Braidwood and Braidwood 1960, 48–49, 501.

[24] Braidwood and Braidwood 1960, 80.

[25] Braidwood and Braidwood 1960, 70.

[26] Braidwood and Braidwood 1960, 146.

[27] Braidwood and Braidwood 1960, 181–190.

[28] Mazzoni 2002, 71.

[29] Braidwood and Braidwood 1960, 264.

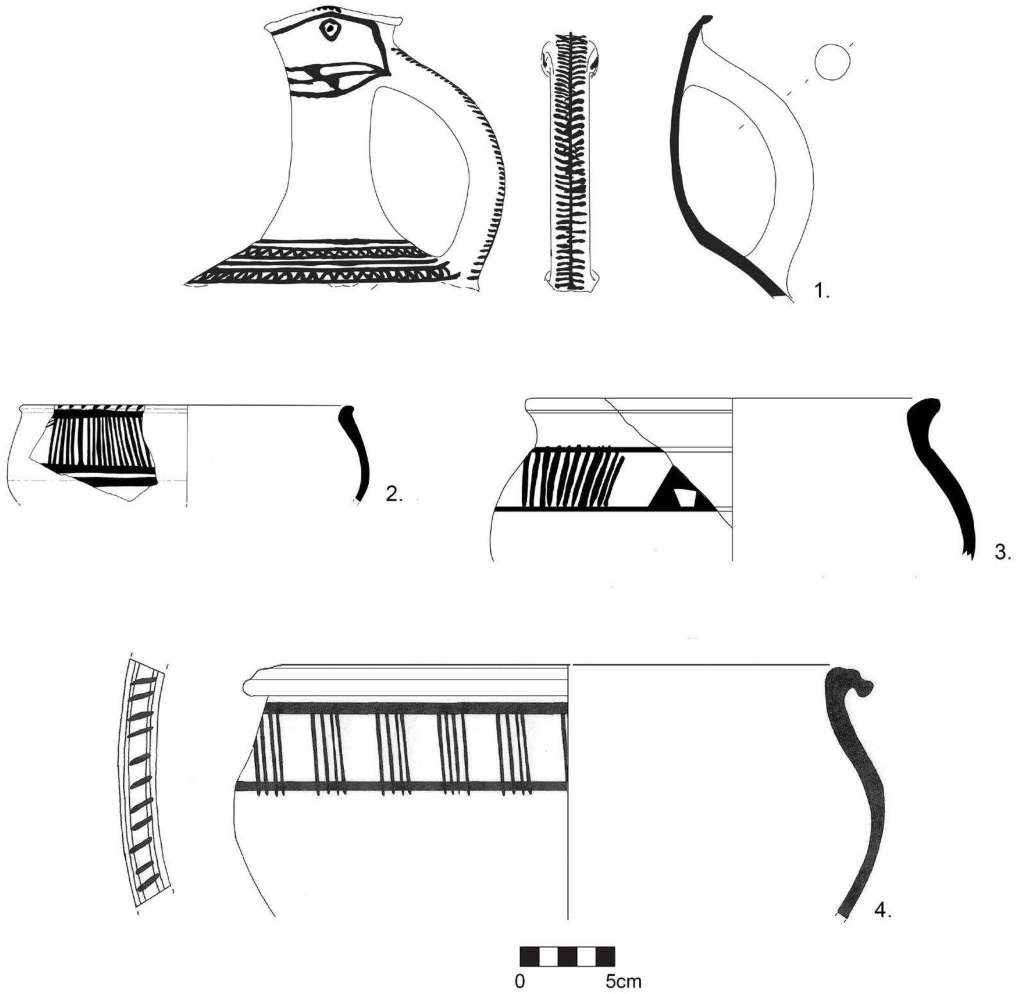
[30] Braidwood and Braidwood 1960, 518; Mazzoni 2002, 74.

[31] Woolley 1955, 352, Pl. CVIII.n-o; Mazzoni 2002, Pl. XLV.

[32] Nigro 2002, 98.

[33] Bagh 2003, 220.

[34] Bagh 2003, 234–235.



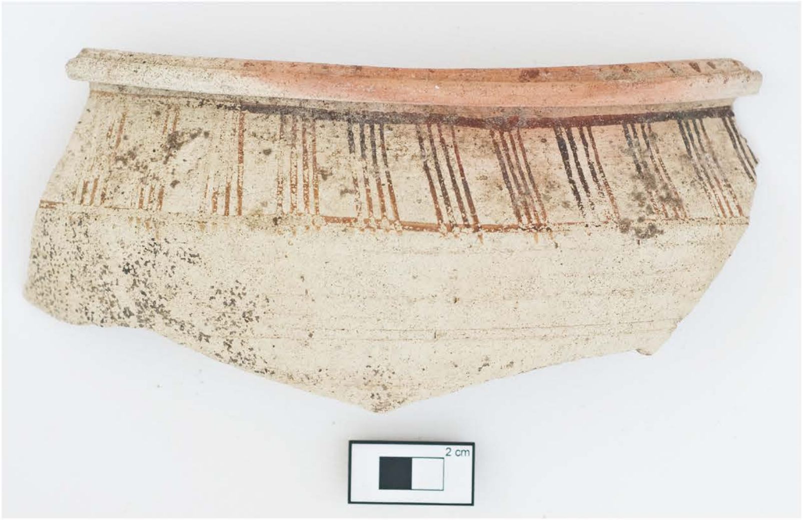


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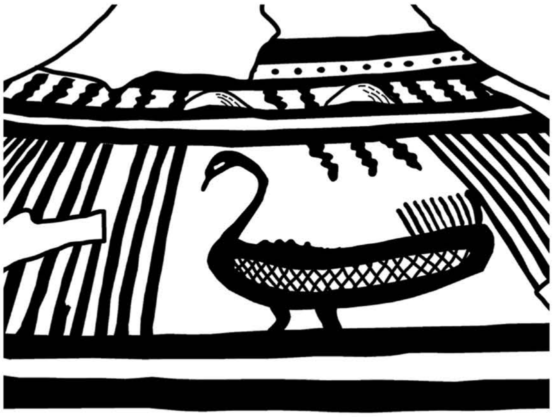
Figure 2: *1) AT 6124.3, 33.32 Loc 49, Syro-Cilician Ware bird's eye pitcher; 2) AT 6124.3, 33.32 Loc 49, Syro-Cilician Ware s-curve bowl; 3) AT 10527.1, 33.32 Loc 77, Syro-Cilician Ware krater; 4, 5) AT 12855.1, 32.57 Loc 206, Syro-Cilician Ware krater (Alalakh Archives).*



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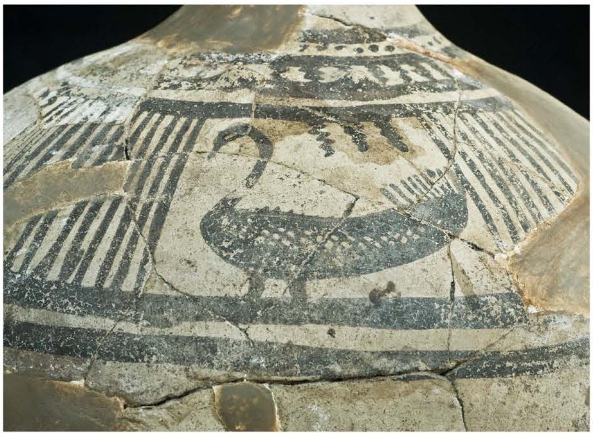

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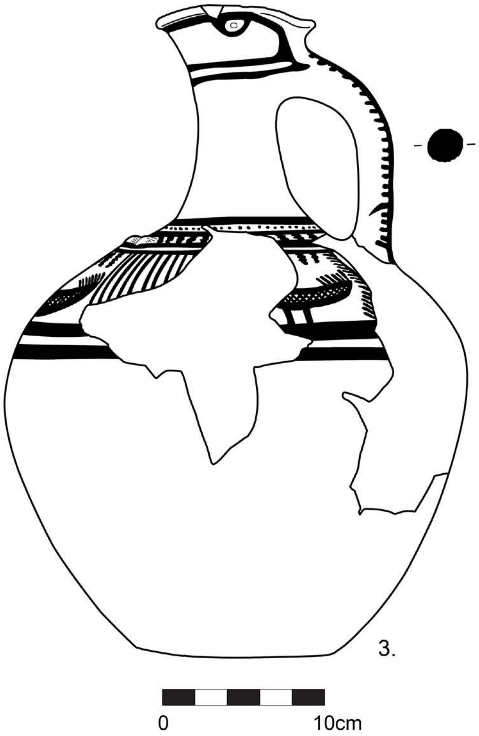

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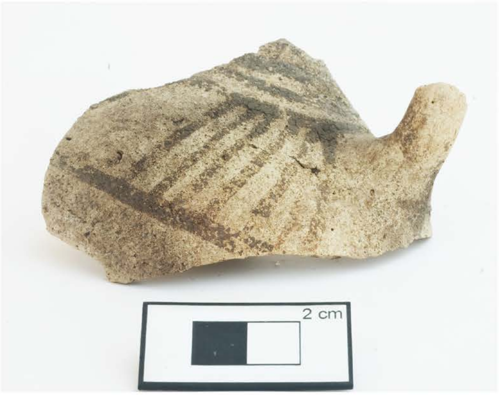

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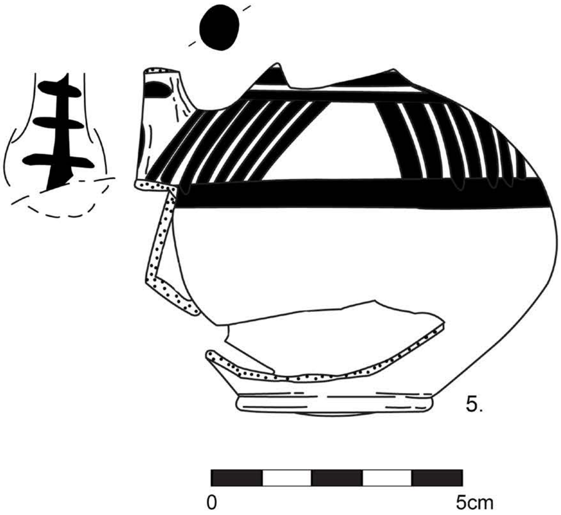

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Figure 3: *1, 2, 3) AT 10539, 33.32 Loc 84, Syro-Cilician Ware bird's eye pitcher; 4, 5) AT 10595, 33.32 Loc 77, Syro-Cilician Ware juglet (Alalakh Archives).*

Within Alalakh's Syro-Cilician Ware,[35] figural decoration is uncommon except for birds (usually geese or swans), particularly popular both as bird-headed vessels (**Figures 2.1, 3.3**) and painted on the shoulder (**Figure 3.1–3**). Rare figures include humans, deer, and long-horned goats or sheep.[36] Vegetal motifs sometimes occur on handles (**Figures 2.1, 3.3**) or in panels with figures.[37] Dots occur in horizontal rows (**Figure 3.1–3**), singly, or as a dot within a circle of dots.[38] The majority of Syro-Cilician motifs are geometric and are mostly a standard grammar of ornament holds true throughout: metopes on the shoulder created by groups of vertical lines (**Figure 2.2–5**) between multiple thick or thin horizontal lines on shoulders; rim radials (**Figure 2.4–5**), vertical and horizontal wavy or zigzag lines (**Figures 2.1, 3.1**); handle 'trees' (**Figure 2.1, 3.3, 5**); triangles either small and filled (**Figures 2.3, 4.1**) or larger and hatched;[39] and less commonly pendant wavy lines (**Figure 3.1–3**). The circle-and-dot motif is used to create the famous bird-headed pitcher (**Figures 2.1, 3.1–3**). Cross-hatch and checkerboard panels also occur.[40] Besides pitchers, the most commonly painted shapes are kraters (**Figure 2.3–5**) and s-curved bowls (which may be cups) (**Figure 2.2**).[41] Woolley's published sequence of Middle Bronze Age pottery, including Syro-Cilician Ware from Periods 17–7, have been further examined by several authors.[42] A new study is underway by Alalakh ceramicist Müge Bulu.

Late Bronze Age Geometric Ware

The final phase of Syro-Cilician Ware production at Alalakh may be Period 7. In Period 6, finds of classic Syro-Cilician Ware are thought to be entirely residual. The four destruction events at Alalakh, ending Periods 8, 7, 6b, and 6a,[43] left behind burn layers and human casualties. Clearly the period of ca. 1650–1550 BC was an unstable and dangerous time in the Amuq. Recent research has also revealed an increase in wild faunal food resources at that time.[44] Against this background is the apparently rapid abandonment of the classic Syro-Cilician pottery style, which had endured for four hundred years, and the adoption of entirely different aesthetics.

Nevertheless, some of the Syro-Cilician motifs are carried over and combined with new motifs in new spatial arrangements on a small minority of the ceramic corpus. These are placed in Alalakh's category 'Late Bronze Geometric Ware,' which serves as a catch-all for a broad variety of painted ceramics combining motifs beyond the horizontal stripes that constitute Banded Ware (described below). The surviving Middle Bronze Age motifs includes triangles both solid and hatched, crosshatch and checkerboard panels, metopes, dots, wavy lines, and human/animal figures. Motifs more typical of Late Khabur Ware, such as pinwheels, 'butterfly' paired triangles, and panels of stacked triangles, also begin to appear at Alalakh in Period 6.

A group of three fragmentary vessels from the Period 7/6 transition horizon in Area 1 (**Figure 4.1–3**) show the sudden departure from Syro-Cilician standards with motifs applied in new ways within the tradition of shoulder metopes. In all three vessels, paint color fades from black to brown to red apparently depending on firing and the thickness of the paint (**Figure 4.2**). Diagonal lines divide a metope of two horizontal wavy lines topped with a rim border of filled triangles in this deep inturning bowl, a shape outside the usual Syro-Cilician repertoire (**Figure 4.1**). A metope consisting of an X

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[35] See Bulu 2016; 2017.

[36] Woolley 1955, Pl.XCII–III, XCVII–III.

[37] Woolley 1955, Pl. XCIII.a

[38] Woolley 1955, Pl. XCIII.c–e.

[39] Woolley 1955, Pl. XCIII.h

[40] Woolley 1955, Pl. XCIII.b, k.

[41] Horowitz 2015, 165.

[42] Williams and Hassert 1978; Heinz 1992.

[43] Woolley 1955.

[44] Horowitz and Cakirlar 2017, 222.

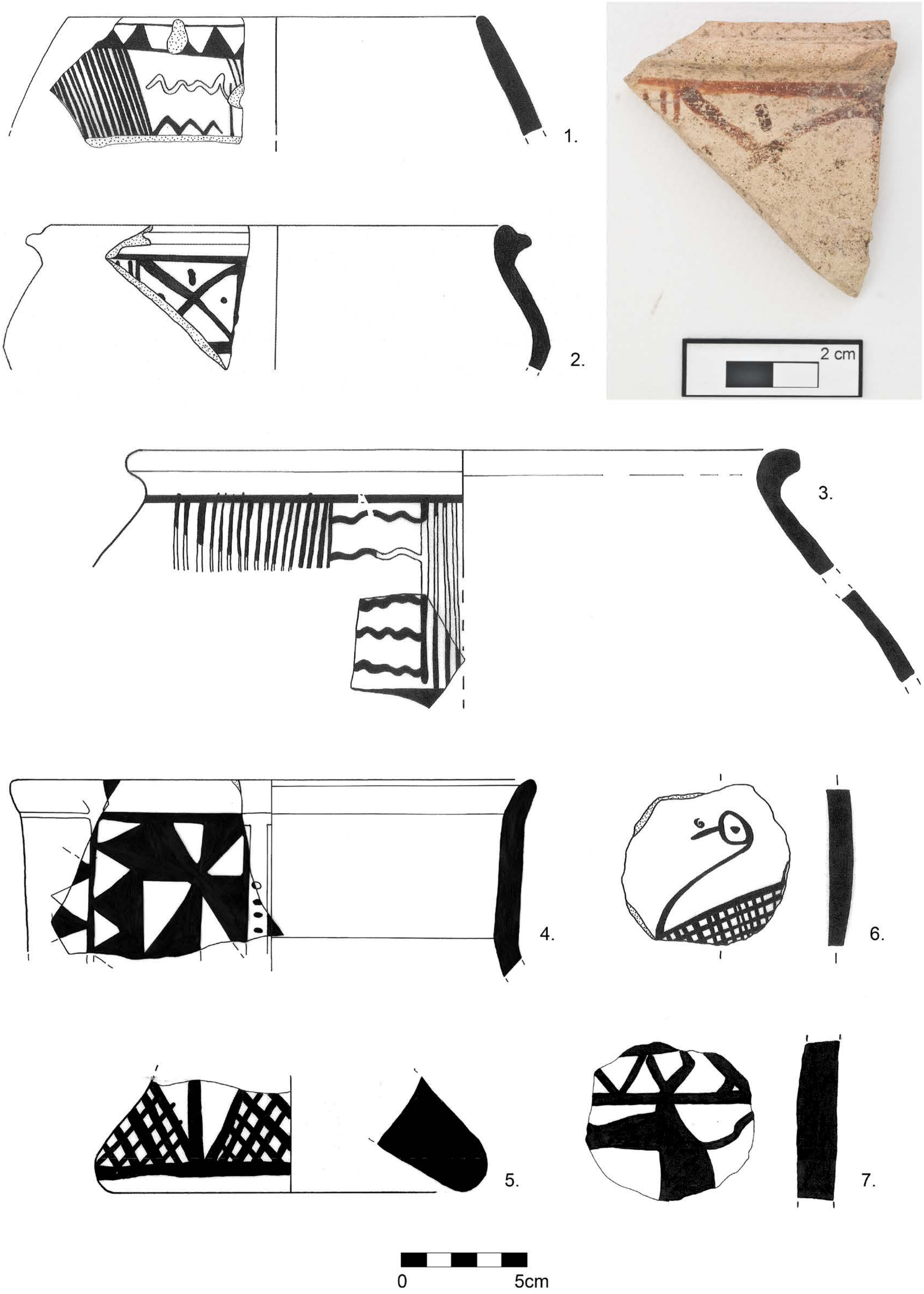

Figure 4: *1) AT 12367.1, 32.57 Loc 185, Syro-Cilician Ware deep bowl; 2) AT 12367.2, 32.57 Loc 185, Syro-Cilician Ware krater; 3) AT 12399.1, 32.57 Loc 185, Syro-Cilician Ware krater; 4) AT 10043.1, 32.57 Loc 157, Late Bronze Geometric Ware high-necked jar; 5) AT 1833, 32.57 Loc 43, Late Bronze Geometric Ware base of unknown form; 6) AT 12664.1, 32.57 Loc 185 Syro-Cilician Ware reused sherd; 7) AT 3615.2, 45.44 Loc 28, Late Bronze Geometric Ware reused sherd (Alalakh Archives).*

motif and four dots (which Woolley called a 'Union Jack', and which appears in classic Syro-Cilician Ware) was set between vertical lines on this small krater (**Figure 4.2**). Large groups of vertical lines separate metopes of multiple horizontal wavy lines on the shoulder of this large hole mouth jar, also not a shape that was typically painted in Syro-Cilician Ware (**Figure 4.3**). Also found in this context was a reused sherd, carved into a circle (very common throughout Alalakh's contexts, purpose unknown) which made use of a traditional Syro-Cilician water bird (**Figure 4.6**).

Clearly, the Period 7/6 boundary was a watershed for Alalakh in many ways, politically and in material culture.[45] From this point in time onwards, the metope-based geometric-figural painted tradition scatters. No two pieces are exactly alike in shape, layout, or motif, which is why 'Late Bronze Geometric Ware' is less a ware than a fringe group with potentially varied inspirations. Figural motifs are even more rare than geometric motifs in the Late Bronze Age. In Period 5 we have this high-necked jar (**Figure 4.4**), not a common shape at Alalakh where jars are typically globular (without distinct neck-shoulder join line). On the neck, only a fragment of which survives, is a windmill motif bordered by a vertical line of filled triangles on one side and a vertical line of dots on the other. Windmills are well known from Khabur Ware.[46] Equally enigmatic is this base from Period 5, very thick and possibly part of a rare object such as an incense burner stand (**Figure 4.5**). Hatched triangles, in this case separated by single upright lines, are very common in Khabur Ware.[47] The tradition of carving sherds into circles continues, the vast majority being plain, but this find from Period 5, Area 3 (**Figure 4.7**), echoes the example described above. Here, the figure might be a horse or deer below a horizontal zig-zag line.

While many influences in Late Bronze Age Geometric Ware at Alalakh are clearly from the east in Late Khabur Ware, caution should be used in classifying a vessel from one location that displays characteristics of another region. Despite continual discussion, the definition of a 'Late Khabur Ware' still lacks a consensus.[48] For a vessel made at Alalakh in the Late Bronze Age I period, we have as yet no interpretive framework in place to explain the appearance of Khabur style motifs and Jezireh vessel shapes in the Alalakh repertoire. Without more information about the political and demographic situation in the Amuq and the Jezireh at that time, observations on the ceramics are limited to the 'influence' and interaction between these regions. It is also possible to observe that vessel shapes and painted motifs from the Late Khabur Ware tradition are rapidly absorbed into the local Alalakh tradition and combined with local features to create something new.

Consider this remarkable piece from Woolley's collection, ATP/39/279, from Level V (**Figure 5.1–3**), which contains two large vertical panels of geometric decoration and a scene of a human figure (identified as a hunter by Woolley) with a variety of birds and animals.[49] The cylindrical cup form ('grain measure') is introduced to Alalakh from the east in Period 6. The larger panel has three vertical strips: four columns of stacked triangles on the left, crosshatch in the middle, and two columns of butterfly triangles interspersed with rows of dots on the right. The smaller panel consists of stacked triangles with the right-hand column reversed in respect to the three columns on the left side. These panels resemble textiles and might be inspired by contemporary textile designs.

The single (preserved) human figure has a triangular torso, broad hips possibly indicating a short tunic, thin arms and legs, and a curling streamer emerging from the top of its schematized head. Its right arm appears to be holding the hilt of a sword attached at the waist. The object in the left hand

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[45] Gates 1981, 30–32; Mazzoni 2002, 131.

[46] Faivre and Nicolle 2007, Pl. XIV.498; Pfälzner 2007, Pl. VIII.73.

[47] Faivre and Nicolle 2007, Pl. XVI.12; Pfälzner 2007, Pl. VII.61.

[48] Oguchi 2000, 103–104; Pfälzner 2007, 231–232.

[49] Woolley 1955, 318, Pl. XCV.

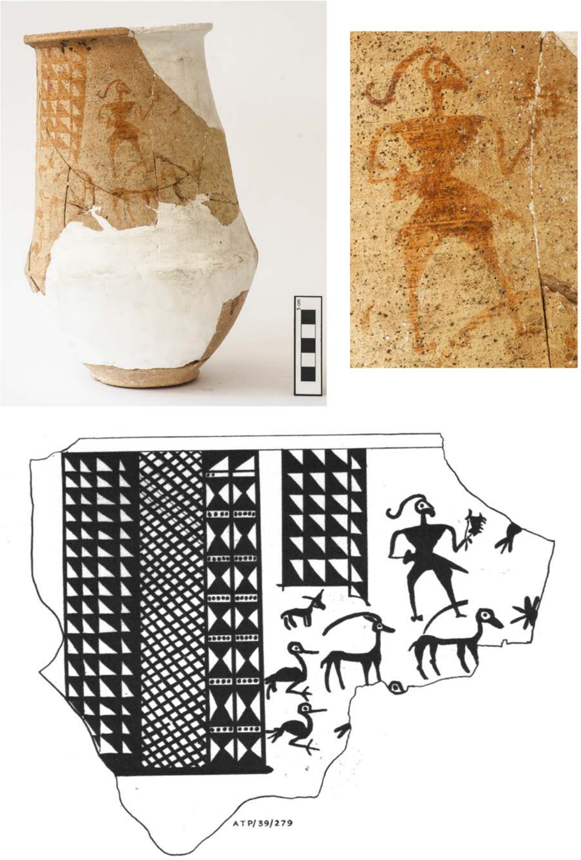

Figure 5: *ATP/39/279, Late Bronze Geometric Ware cylindrical cup (Alalakh Archives), illustration (Woolley 1955 Pl CXV).*

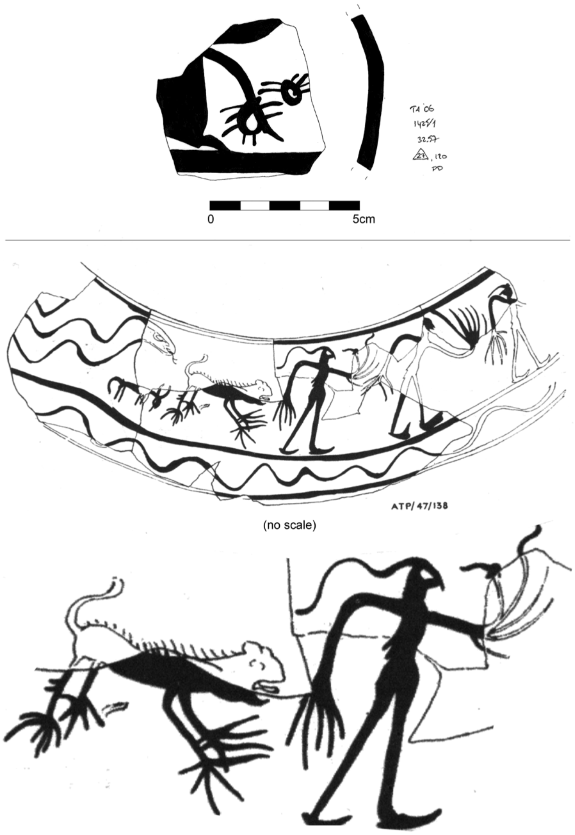

Figure 6: *1) AT 1425.1, 32.57 Loc 27, Late Bronze Geometric Ware body wall of closed vessel (Alalakh Archives); 2) ATP/47/138 (Woolley 1955, Pl. XCVI).*

is unclear. Below the human are two likely antelope with long horns. To their left are two long necked birds and a small quadruped with shorter horns. Another likely bird is partially preserved below the antelope. A star-like motif appears to the right of the antelopes, and the edge of an unknown motif can be seen just before the break to the right of the figure. In vessel form and painted motifs both geometric and animal/human, parallels can be found in Late Khabur Ware at Tell al Rimah, Tell Brak, and Tell Barri though none are arranged in exactly the same way as the Alalakh example.[50]

There are also some examples of extremely stylized human and/or animal figures in the Alalakh corpus that do not match any known tradition, such as the 'spiky-hands' fragment (**Figure 6.1**) perhaps meant to indicate claws. There is a distant similarity to a remarkable and unique piece found by Woolley in Level IV (**Figure 6.2**).[51] The 'beaker' (large cylindrical cup, as in **Figure 5**) is decorated with a row of fantastical figures including zoomorphic and anthropomorphic forms. Partly preserved are three 'bird-man' figures with long finger-claws and a quadruped with equally long digits and spikes along its back. Parallel wavy lines have been restored as a huge snake, though this is unsubstantiated. This piece is in need of restudy, to determine if it is an import to Alalakh.

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[50] For Tell al Rimah see Postgate *et al.* 1997, Pl. 78. For Tell Brak see Mallowan 1947, Pl. LXVII.19. For Tell Barri see D'Agostino 2014, Pl. 3.21–22.

[51] Woolley 1955, Pl. XCVI.e ATP/47/138.

Banded Ware and international style

In Period 6, just as Syro-Cilician Ware disappeared, Cypriot pottery began to appear at Alalakh in significant numbers. The two trends might be related, in that decorative tablewares with international connections were now preferred over the local predecessors and thus, Cypriot pottery replaced Syro-Cilician Ware. However, as we have seen already, local painted pottery did not die out at Alalakh at this time. While scattered occurrences of Late Bronze Geometric Ware continue throughout the Late Bronze Age, a new painted style emerged that had both broad international ties and harked back to ancient traditions of the Amuq plain. The new aesthetic that dominates Late Bronze Age painted pottery at Alalakh consists of multiple broad horizontal bands, named 'Banded Ware', and it does constitute a coherent ware with a regular repertoire of shapes and motifs.

Banded Ware is found in six major shape groups at Alalakh: plate, bowl, stand, cup, jar, jug. Within those categories there are fourteen shape subtypes found in Banded Ware, all of them also found in plain Simple Ware. Paint color is most often orange-red, and while paint consistency may vary and affect intensity of the color, burnishing is often used to bring out the color. Without burnishing, the red paint turns brown and the natural streaks from painting can be observed (**Figure 7.1**). With burnishing, most often horizontal, the color is stronger red (**Figure 7.2**).

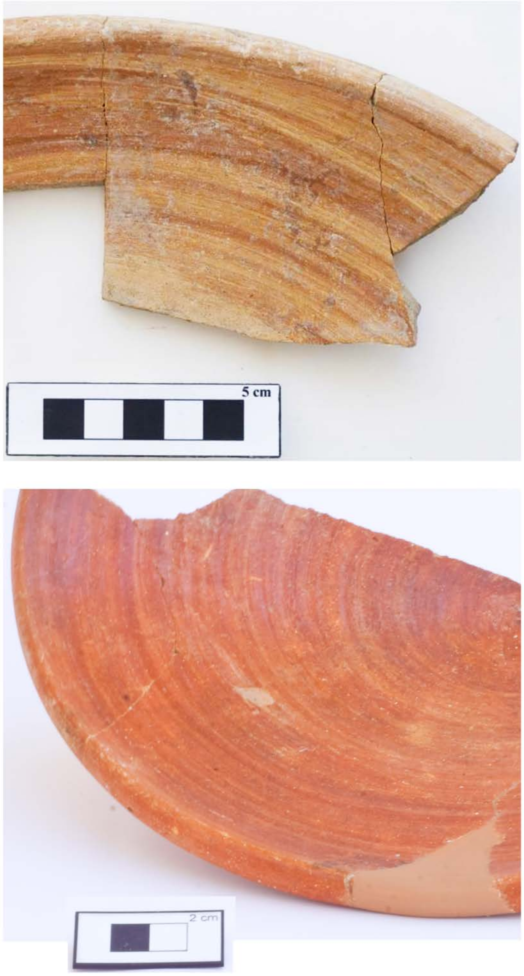

Figure 7: *1) AT 3629.1, 45.44 Loc 28, Banded Ware plate; 2) AT 8368, 32.57 Loc 72, Red Slip Ware plate (Alalakh Archives).*

Within the range of Simple Ware fabrics are some with considerably more iron, which may derive from sources to the east of Atchana where *terra umbra* soils are found on the limestone hillsides around Reyhanlı. In an oxidizing firing, needed to bring out the red color of the paint, some fabrics respond more strongly and change from pale tan or cream to salmon-pink or peach. It is not yet known how the red paint was fabricated. Clay sources in proximity to the mound are relatively low in iron, so there may have been a trade in materials such as natural red ochre that could produce a strong red color. In the uncommon instances where black paint is found, it may simply be the result of reducing atmosphere as the corresponding fabric is usually pale cream to gray (as in Syro-Cilician Ware). It is uncertain whether this was a deliberate attempt to create the black color, or merely accidental. Raman Spectroscopy analysis of the paint samples is ongoing.

Another allied tradition is important to mention here. There is a Red Slip Ware at Alalakh, and it is closely connected to Banded Ware in that the fabric, forms, paint/slip, and burnishing are all the same. The red paint has simply been applied all over the vessel or more often, in the case of plates, just the upper face and over the rim (creating a typology conundrum) (**Figure 7.2**).

While red slipped vessels did occur rarely in Middle Bronze Age Alalakh, in the Late Bronze Age they become more common and can occur at frequencies similar to Banded Ware at 5–6% of the sherd assemblage. At least fifteen different shape subtypes within six macro types (plate, bowl, cup, jar, jug, pitcher) can be found in Red Slip Ware, mostly identical to shapes in plain and painted Simple Ware. In general, Woolley noted an abundance of Red Slip Ware in Palace IV, including elaborate shapes that disappeared thereafter.[52] From Periods 6 to 1 and even within periods, there is considerable variety in the opacity, color, and burnishing of the red slip and in the specific Simple Ware fabrics beneath (which can vary from fine with sand temper to lumpy with sparse organic temper). The same is true of Banded Ware vessels with variety in the color and opacity of paint and the Simple Ware fabric subtype.

One of the standout features of the Alalakh Late Bronze Age assemblage are these plates (**Figure 8.1–2**), which are distinguished from shallow bowls (**Figure 8.3**) by their proportions: their radius is more than twice their total height.[53] This proportion does not occur in Alalakh Middle Bronze Age pottery until the very end of the sequence (Period 8) and is thus worthy of special attention.[54] In profile (**Figure 9.1–6**) they may not look significantly different from shallow bowls, but ongoing experimental work has shown that the plate has very different functional parameters and cannot be lifted while containing liquid. These plates first appear in low levels in Alalakh Period 8, but only become common in Alalakh Period 6 in both Plain Simple and Banded Ware. Plates are most commonly 28–32 cm in diameter, but occur rarely at 40 cm (**Figure 8.1**), 18–22 cm (**Figure 9.3–4**), and 10–12 cm (**Figures 8.4, 9.6**), the latter sometimes with tripod feet (**Figures 8.5, 9.5**). Together they dominate the Alalakh Late Bronze Age assemblage and may indicate a change in dining style.[55]

Region-wide, both the plate and the banded decoration can be found across a large area from the Khabur to Cilicia and from Alalakh to Lebanon to Egypt.[56] Following this trend is difficult for several reasons – the diversity of terms used for these shapes makes it necessary to comb through hundreds of profile drawings from each site, and the diversity of chronological preferences for the beginning

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[52] Woolley 1955, 318–319.

[53] Horowitz 2015, 167.

[54] Horowitz 2015, 167.

[55] Horowitz 2015, 172–173.

[56] For the Khabur area see Postgate *et al.* 1997, Pl. 34 (Tell Brak); Pfälzner 1995 (Tell Bderi). For Cilicia see Gates 2001, Fig. 2. For Lebanon see Badre and Capet 2014, Fig. 7.g, Fig. 16.a. Killebrew 2004 considers red-banded and red-crossed plates in Southern Canaan to be Egyptian in origin; see also Bietak *et al.* 2008, Fig. 3.4, 10.

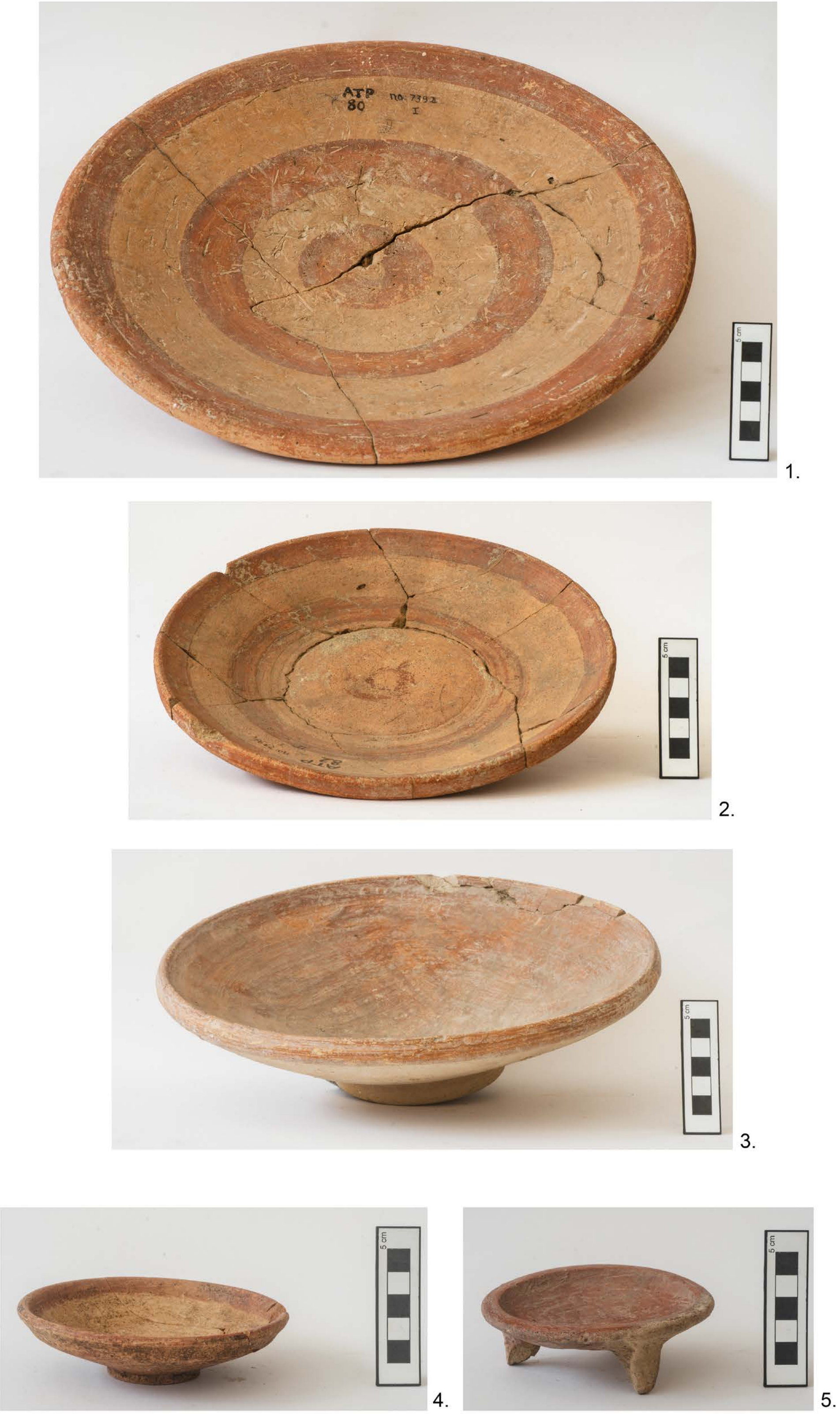

Figure 8: *1) ATP 80 no. 7488, Banded Ware plate; 2) ATP 82 no. 7394, Banded Ware plate; 3) ATP 8 no. 7650, Banded Ware/Red Slip shallow bowl; 4) AT 12577, Banded Ware small shallow bowl; 5) AT 0048 Banded Ware/Red Slip tripod plate (Alalakh Archives).*

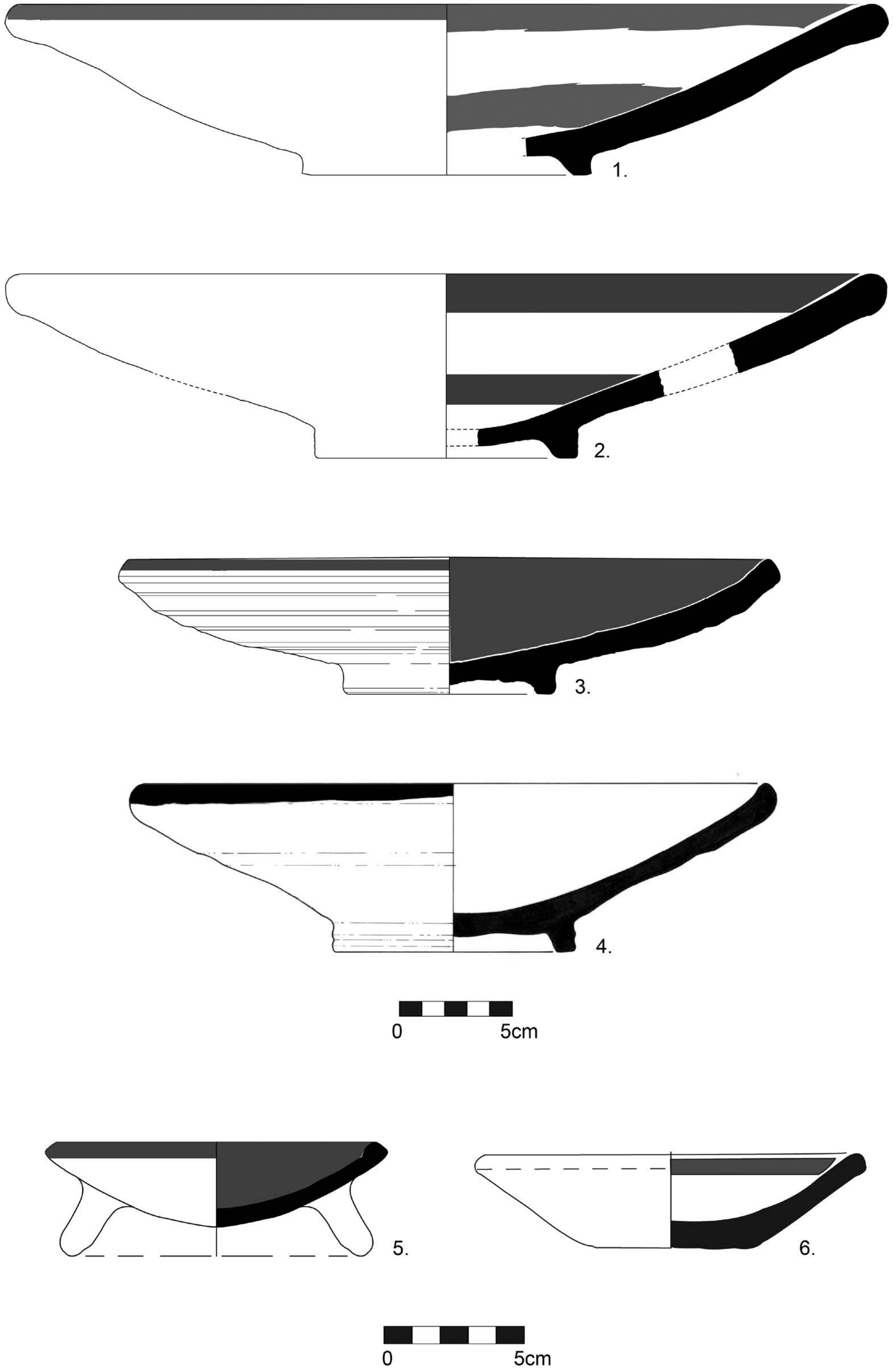

Figure 9: *1) AT 19924.3, 32.53 Loc 61, Banded Ware plate; 2) AT 19902.3, 3253 Loc 61. Banded Ware plate; 3) AT 18578.4, 42.29 Loc 38, Banded Ware/Red Slip plate; 4) AT 3660.1, 32.57 Loc 27, Banded Ware plate/shallow bowl; 5) AT 19935.7, 32.53 Loc 61, Banded Ware/Red Slip tripod bowl; 6) AT 15410.2, 44.86 Loc 13, Banded Ware small plate (Alalakh Archives).*

of the Late Bronze Age preclude any assessment of where the plate shape or banded decoration appeared first. It is currently only possible to say that Alalakh's Simple and Banded Ware plates are part of a major international trend found across many cultural and political boundaries in the Late Bronze Age.[57] Red Slip or Banded Ware small tripod plates/shallow bowls (**Figures 8.5, 9.5**) are also found in the Jezireh.[58]

Cup shapes at Late Bronze Age Alalakh are extremely variable. The cylindrical cup ('grain measure') in both large carinated and everted rim form (**Figure 10.1, 11.1–4**) and small simple form (**Figure 10.2**) is introduced to Alalakh in Period 6, presumably from the Jezireh where they are common in plain ware, Middle Bronze Age and Late Khabur Ware (with multiple horizontal stripes), and Nuzi Ware.[59] Cylindrical cups at Alalakh are made in plain Simple Ware, Banded Ware, and Red Slip Ware as well as Late Bronze Geometric Ware, as discussed above. While thick lines are the most common, thin lines both alone and in combination also occur. Hemispherical cups of the short and tall varieties, usually with a button base, are also found (**Figure 11.5–7**) and have exact parallels in Late Khabur Ware with simple horizontal stripes.[60] Some small forms held over from the local Middle Bronze Age assemblage are ambiguous in character and may have been intended as cups although they are classed with jars at present (**Figures 10.3, 5, 11.8**).[61]

It can sometimes be hard to understand the choices made by Alalakh's Banded Ware producers. If one has a fast wheel to make the pot, why not use that wheel to apply the horizontal stripes? This was not always done, resulting in some spectacularly 'sloppy' pieces (**Figure 10.2–3**) where the horizontal lines swing wildly off level. The piece in **Figure 10.3** is notable for its rim-radials, another surviving Middle Bronze Age motif also common in Khabur Ware.[62] Both were found by Woolley in Level IV.

The unique piece in **Figure 10.4**, dated to Atchana Periods 2–1, is important for several reasons. First, the 'scrolled goblet' form is not otherwise known in any ware besides Black Impressed Ware at Alalakh and has few exact parallels.[63] Second, the fabric does not match local Simple Ware, having a high proportion of a white calcareous temper that caused significant spalling of the surface. Third, the cup was found with two small handstones and a lump of metal inside. Possibly there is some ritual connection to this odd little assemblage. Black Impressed Ware, and the scrolled goblet, are both associated with the Ishtar Temple in Periods 6–4. Though the find location of this Banded Ware scrolled goblet seems unremarkably domestic, it is within 30 m of the Ishtar Temple and might be part of a support area that supplied ritual activity in Periods 2 and 1, the late 14th and perhaps early 13th century BC.

In the Late Bronze Age I, there is a continuation of Middle Bronze Age vessel forms in local graves outside the city walls. The Fine Simple Ware variant is often used to make cups in several forms.[64] The form in **Figure 10.5** and **Figure 11.8** (Period 5–6) is called a short-necked jar but may have been intended as a cup. The application of thin horizontal lines in brown-black paint connects these vessels to Banded Ware. Elsewhere, an extremely rare form at Alalakh is the small cylindrical jar (Levels III–I) (**Figure 10.6**). Due to the lime spalling, it is possible that this vessel was not made on

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[57] Horowitz 2015, 173–174.

[58] Tell Brak: Postgate *et al.* 1997, Pl. 56.496.

[59] Postgate *et al.* 1997, Pl. 67.674, Pl. 70.699; Faivre and Nicolle 2007, Pl. 211.195, 197.

[60] Postgate *et al.* 1997, Pl. 67.653–654, 659–660, 665, 669.

[61] For Middle Bronze Age assemblages see Nigro 2002, Pl. XLVIII.28–31: exact parallels from Ebla; see also Mazzoni 2002, Pl. LVIII.12 for 's-curve cups'.

[62] Faivre and Nicolle 2007, Pl. XV.509 (Tell Mohammed Diyab).

[63] Compare Otto 2014, Pl. 2.Bz 245/33:6, Tell Bazi. For Black Impressed Ware see Woolley 1955, Pl.C: top.

[64] Horowitz 2015, Fig 7.4.4–5.

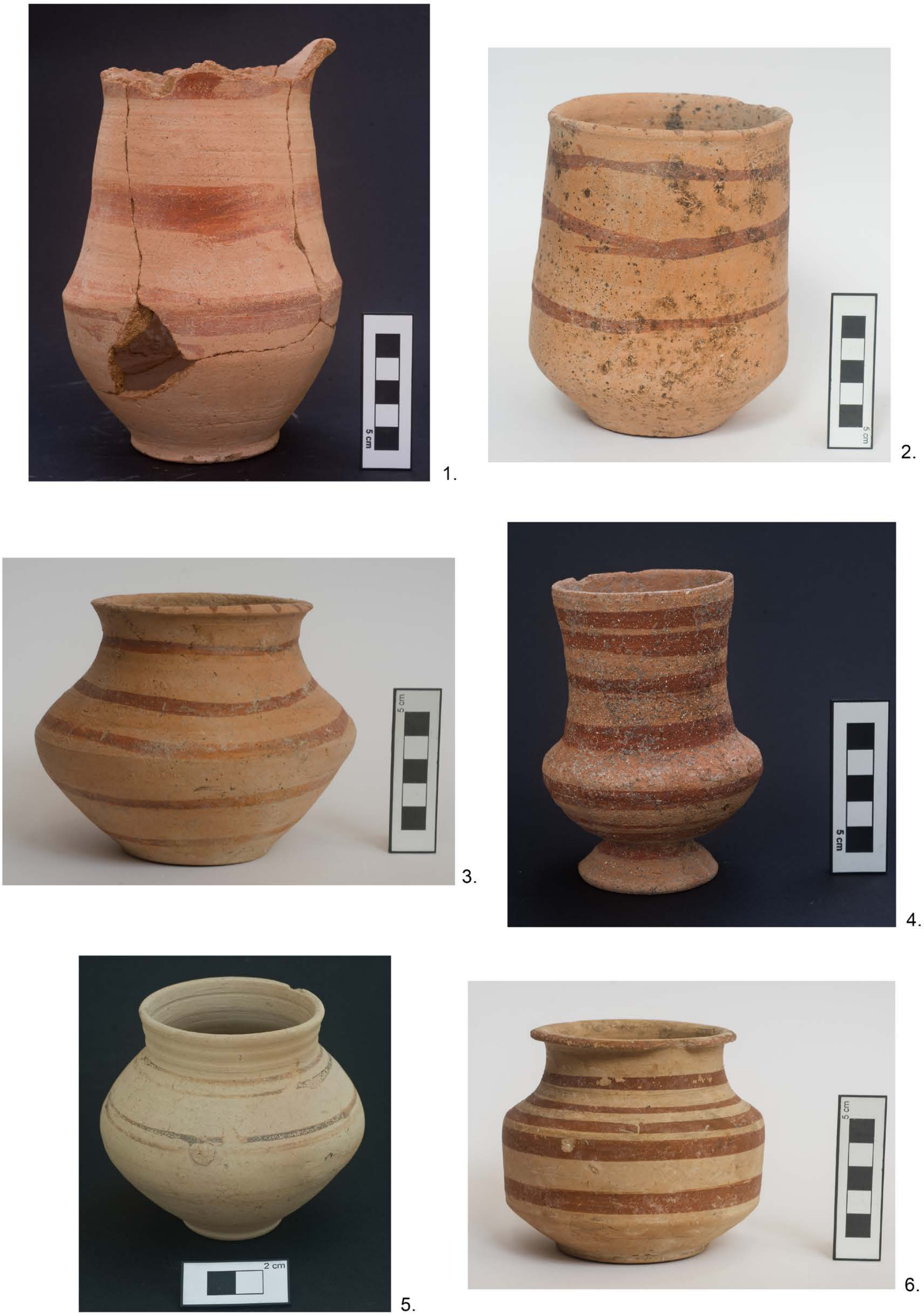

Figure 10: *1) AT 17155, 42.29 Loc 23, Banded Ware cylindrical cup; 2) ATP 47 no. 9768, Banded Ware cylindrical cup; 3) ATP 27-28 no. 9769, Banded Ware biconical jar; 4) AT 22628/22629, Banded Ware scrolled cup; 5) AT 11427, 45.45 Loc 29, Fine Simple Ware short-necked jar/cup; 6) ATP 39-4 no. 7763, Banded Ware cylindrical juglet (Alalakh Archives).*

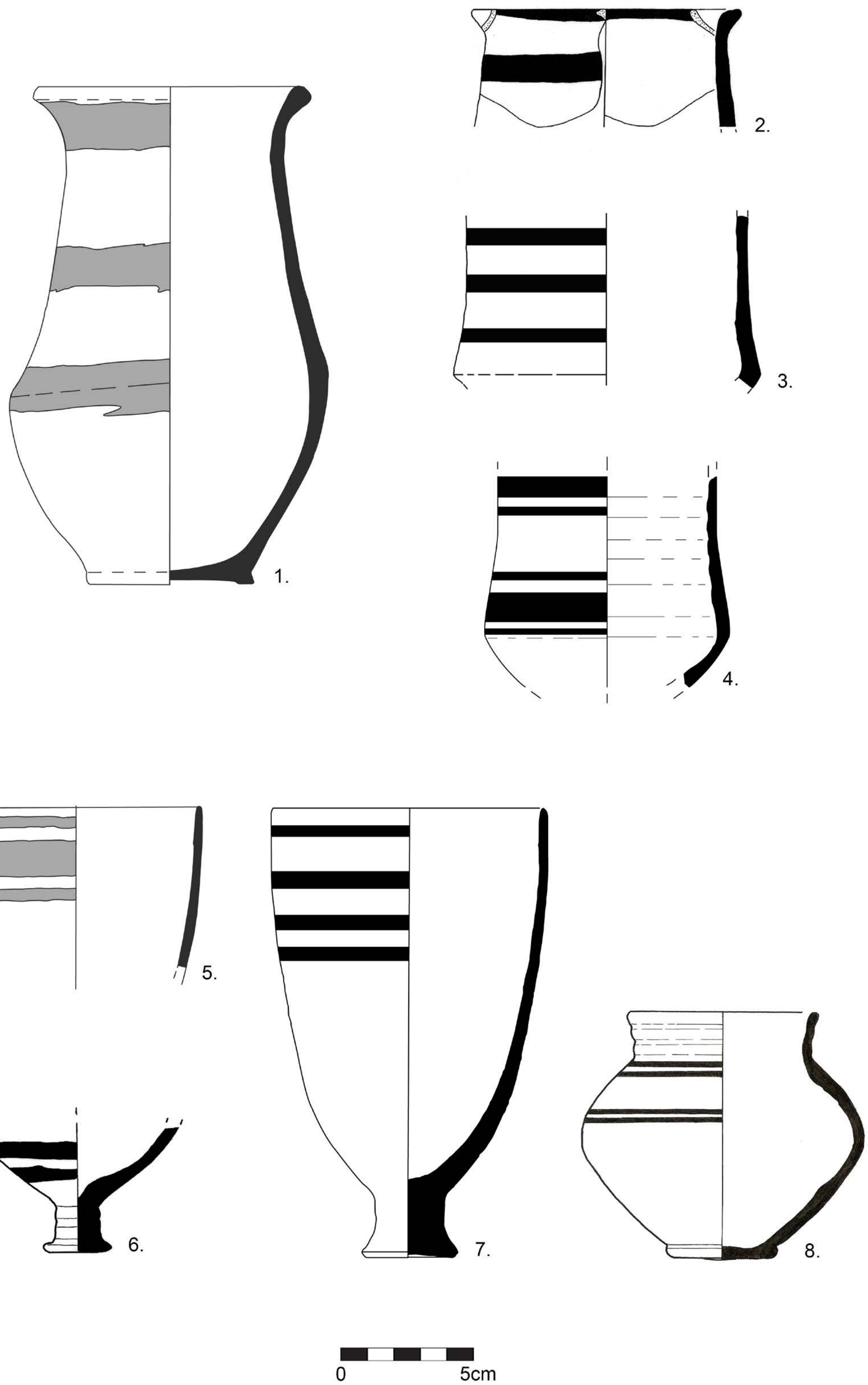

Figure 11: *1) AT 17155, 42.29 Loc 23, Banded Ware cylindrical cup; 2) AT 8166.1, 64.82 Loc 46, Banded Ware cylindrical cup; 3) AT 8097.4 Loc 29, Banded Ware cylindrical cup; 4) AT 16916.200, 64.72 Loc 88, Banded Ware cylindrical cup; 5) AT 18824.2, 64.73 Loc 47, Banded Ware hemispherical cup; 6) AT 1061.300, 64.82 Loc 13, Banded Ware hemispherical cup; 7) AT 19507.1, 32.54 Loc 106, Banded Ware hemispherical cup; 8) AT 11427, 45.45 Loc 29, Fine Simple Ware short-necked jar/cup (Alalakh Archives).*

site. Small cylindrical jars (**Figures 10.8, 13.3**) are very rare at Alalakh and parallels are few.[65] The small cylindrical jar form is known in Banded, Plain Simple, and Late Bronze Geometric Ware.

Larger jars and jugs in Banded Ware are less common but occur with regularity throughout the Late Bronze Age (**Figure 12.1–4**). Placement of the bands varies, but usually includes the rim inside and out. Similar banded jars are already common in Middle Bronze Age Khabur Ware and make the jump to Alalakh in the Late Bronze Age.[66] In the Middle Bronze Age, horizontal stripes on jars at Alalakh were common but made with incision, not paint. Smaller closed vessels with horizontal painted bands include globular jars (**Figure 12.5**) and hole-mouth (neckless) jars with flanged or flaring rim attached directly to the shoulder (**Figure 12.6**).

A subsection of unique vessels from the Late Bronze Age I and II seems to indicate some experimentation with features and motifs of foreign pottery. A unique find is this biconical bottle-neck jar with amphoroid handles from Woolley's Level I (**Figure 12.7**).[67] The horizontal stripes cover the entire body from base to rim, and short vertical lines encircle the neck. A unique small bowl with a crude high horizontal loop handle (**Figure 13.1**) might be inspired by Cypriot and Mycenaean pottery. Cypriot White Slip, Base Ring, and Monochrome bowls commonly have horizontal handles, though usually of a wishbone shape. The horizontal loop handle is common on Mycenaean pottery. A unique hemispherical bowl (**Figure 13.2**) might be an imitation of Cypriot White Slip I Ware with wavy rim line and pendant feature. Sometimes no parallels can be found for unique pieces such as **Figure 13.4**, a bowl with red dots sporadically on the interior.

Period 1 deposits at Alalakh (late 14th /early 13th century BC) are directly overlaid by mid-late 12th century BC deposits, sometimes mixed as topsoil, so that pieces like **Figure 13.5**, a small bowl with long open spout at the rim, can be hard to date. Long open spouts appear at Alalakh for the first time in Period 2 (late 14th century BC) on plain Simple Ware bowls and small biconical jars.[68] This sole painted example could belong to that tradition, or to the adaptation of Late Helladic III-middle Ware to local purposes in the 12th century BC. Once it was established that the topsoil plow zone across the Atchana mound contained mid-11th century BC material,[69] several painted vessels recovered from the slopes in Area 1-south were reevaluated for date (**Figure 13.6–7**). Hatched triangle bowls and kraters such as these are now thought to belong to the Early Iron Age, having been mixed into late 14th century BC deposits by slope erosion and possibly also by the use of Bronze Age ruins as discard areas in the Early Iron Age. This phase of local painted ware is being studied by Alalakh's Iron Age specialists Marina Pucci and Mariacarmela Montesanto.

Local Nuzi Ware industry

In the mid-14th century BC, a local Nuzi Ware industry was set up at Alalakh and thus must be considered in any review of our painted pottery.[70] Chemical and petrographic analysis confirm the local source.[71] Nuzi Ware is the pottery of the Mitanni elite, originating in the Khabur Valley out of ancient precedents including Khabur Ware and found eventually across a large area controlled by the Mitanni Empire in the 15th and 14th centuries BC. The ware is typically made of pale clay wheel-thrown into a variety of thin-walled shapes, especially cups but also small jars and bottles,

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[65] Faivre and Nicolle 2014, Pl. X.339–341.

[66] Woolley 1955, Pl. CXIX.11. For the Middle Bronze Age Khabur Ware see Faivre and Nicolle 2007, Pl. X, Tell Mohammed Diyab.

[67] Woolley 1955, Pl. CXVI.79.

[68] Horowitz 2015, 171–172.

[69] Koehl 2017.

[70] Bataray 2012; 2020.

[71] Erb-Satullo *et al.* 2011.

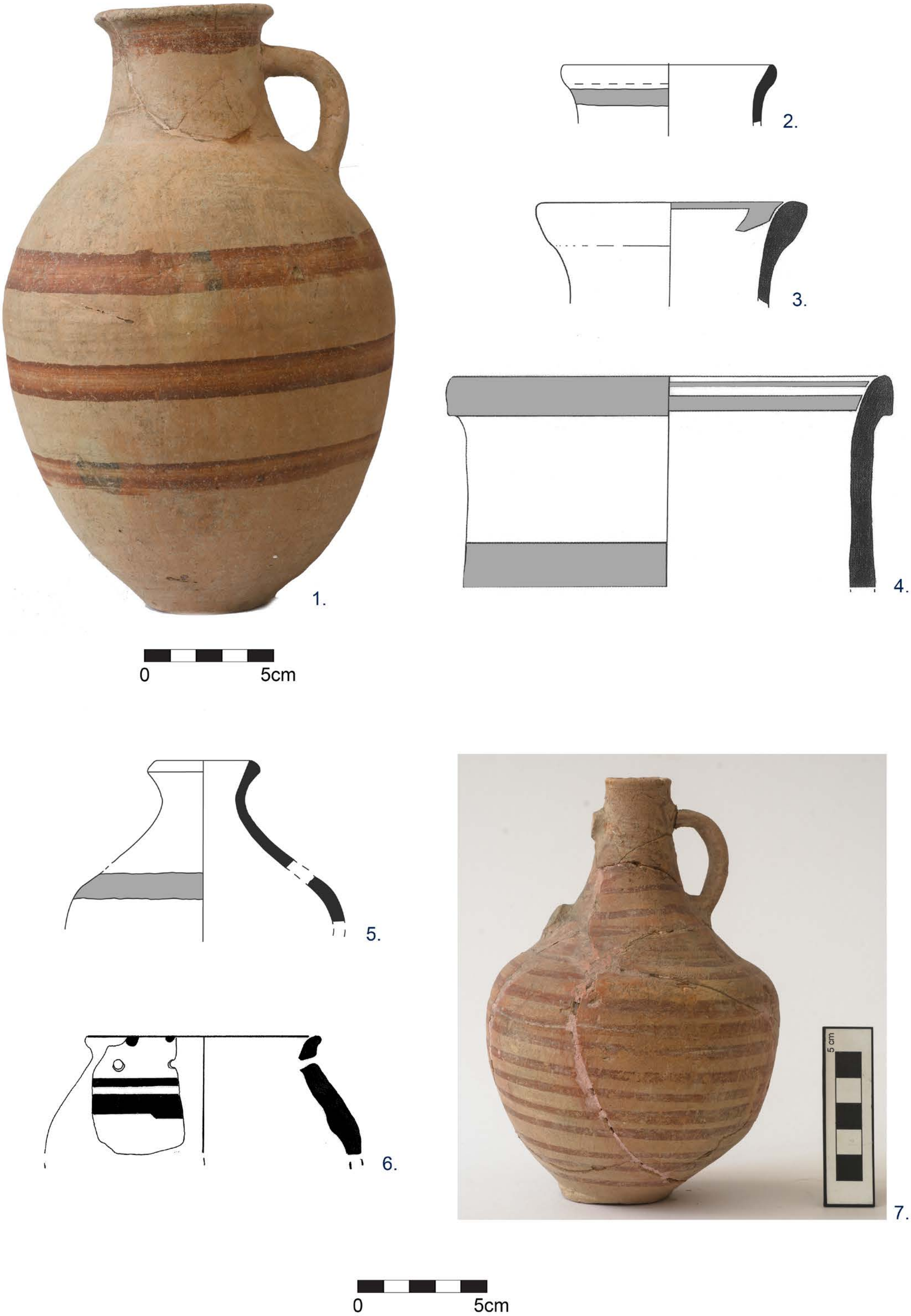

Figure 12: *1) AT38 No. 7488, Banded Ware high-necked jar; 2) AT 11114.1, 32.42 Loc 1, Banded Ware jar; 3) AT 0789.29, 37.57 Loc 7, Banded Ware jar; 4) AT 12154.904, 32.56 Loc 66, Banded Ware high-necked jar; 5) 14941.20, 32.42 Loc 11, Banded Ware juglet; 6) AT 7357.1, 45.44 Loc 60, Banded Ware hole mouth jar with pre-firing holes; 7) AT 38.25 No 7666, Banded Ware biconical bottle-neck jar with amphoroid handles (Alalakh Archives).*

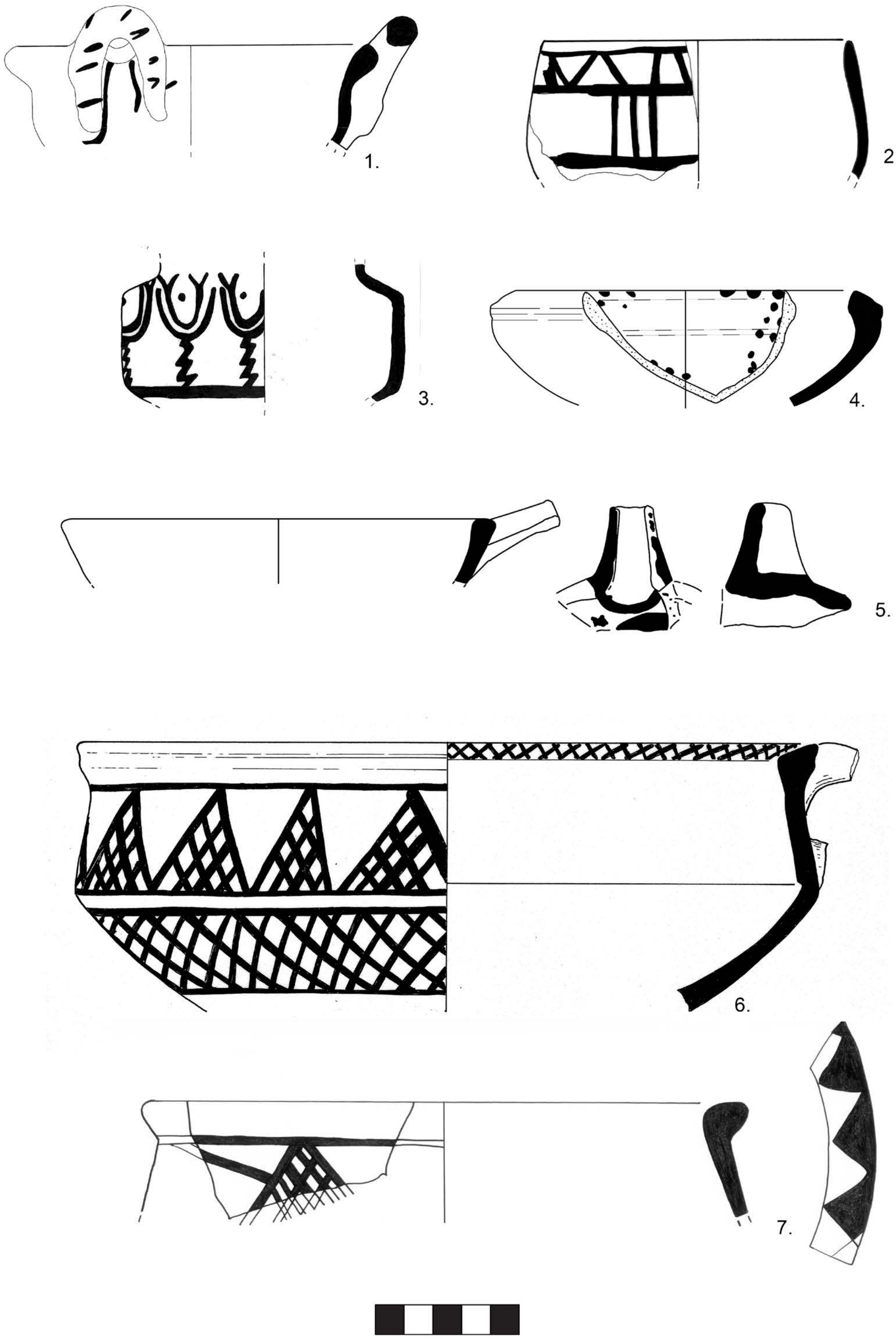

Figure 13: *1) AT 8115.1, 45.44 Loc 69, flared bowl possibly imitating Cypriot original; 2) 2852, 45.44 Loc 11, hemispherical bowl possibly imitating Cypriot original; 3) AT 1544.200, 64.72 Loc 25, Late Bronze Geometric Ware cylindrical goblet; 4) AT 20278.2, 64.72 Loc 99, untyped painted Simple Ware with atypical rim; 5) AT 20835.1, 42.06 Loc 4, untyped painted Simple Ware with open spout; 6) AT 11500.1, 42.29 Loc 13, carinated bowl likely belonging to the Iron Age; 7) AT 10306, 42.29 Loc 3, krater likely belonging to the Iron Age (Alalakh Archives).*

animal askoi, and kraters. Decoration consists of broad horizontal zones in black paint that were overpainted with elaborate designs in white. Atchana artisans invented a new decorative repertoire for their Nuzi ware, incorporating elaborate motifs reminiscent of Minoan designs. It is not known whether these artists were primarily immigrants from the Mitanni Kingdom, or whether local artists founded this tradition. Likely it was a combination of migrant artists and local potters. The fabrics are synonymous with local Simple Ware and the black paint is shown to be red in origin when the firing atmosphere faltered, as with the fragment of a krater in **Figure 15.10**.

Woolley believed that there was a major fluorit of Nuzi Ware in his Level II, and as the ware had developed a scheme of decoration unknown in the East, he applied the name 'Atchana Ware'.[72] He further states that he found no Nuzi Ware in Level I, including the Level I Houses, where he gives specifics of the floor levels that seem to seal the contexts containing the Nuzi finds.[73] As Woolley's Private Houses were not all renovated concurrently, however, a re-study of the evidence may blur the line between Periods 2 and 1 in this area somewhat. The same note also presents evidence for one to three Nuzi sherds that might belong with Level V; otherwise, the first substantial appearance of Nuzi was in Level IV. Woolley put a date on the introduction of Nuzi Ware to Atchana of ca. 1430 BC.[74] The evidence for phasing from Nuzi Ware finds in the 2006–2010 excavations is equivocal, with a relatively constant amount found in Periods 3–1. Woolley's claimed disappearance of Nuzi Ware in Level I was not confirmed.

Finds of Nuzi Ware in recent excavations include two partially restorable kraters (**Figure 14.1–2**). A krater with two handles shown by Woolleyis very similar to **Figure 14.1** in decoration and in the hybridization of form between 'necked' and 'biconical.'[75] Woolley's example is more complete and has a design resembling snake scales on the body. **Figure 14.2** has a similar design on the neck but repeats the 'tree' motif on the body below a row of large florets and fits the 'necked krater' type. It is not known if this vessel (AT 1638.200) had handles. Woolley notes the similarity of the Nuzi Atchana Ware krater in form and decorative motifs to the example he found in Black Impressed Ware.[76] He suggests that the visual effect of the white on black paint of Nuzi Ware was derived from the white-filled incisions on black surfaces of Black Impressed Ware,[77] which itself derived from older traditions such as 'Sgraffiato' Ware in the Early Bronze Age.

Cups are a common shape in Nuzi Ware among both Woolley's and recent excavations. The cylindrical cup (**Figure 15.1–3**) and hemispherical cup are both found in Nuzi Ware, the latter in tall and short varieties. Rim sherds can be distinguished between the two, as the rims of cylindrical cups typically evert outward slightly. The decoration of **Figure 15.1** is very similar to Woolley's (1955) Pl. CII: a. The rim fragment in **Figure 15.6** is likely a wide-mouth globular jar similar to Woolley's (1955) Pl. CVI:ATP/37/91 and 341. The long-legged bird is nearly identical to the one in Woolley's (1955) Pl. CIV:ATP 238, differing only in that the body is not filled in with white. The fragment in **Figure 15.8** belongs to a large krater. The thin-walled fragments in **Figure 15.4–5** could belong to the tall, low-bodied vessels in Woolley's (1955) Pl. CVI:ATP/37/277 and ATP/8/72. **Figure 15.10** is a color photo of **Figure 14.2** showing the irregular coloration of the black slip from brown to red, a common phenomenon in Atchana-made Nuzi Ware.

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[72] Woolley 1955, 347–348.

[73] Woolley 1955, 347, n. 5.

[74] Woolley 1955, 349.

[75] See Woolley 1955, Pl. CIII.f

[76] Woolley 1955, Pl. C.ATP/39/14.

[77] Woolley 1955, 349.

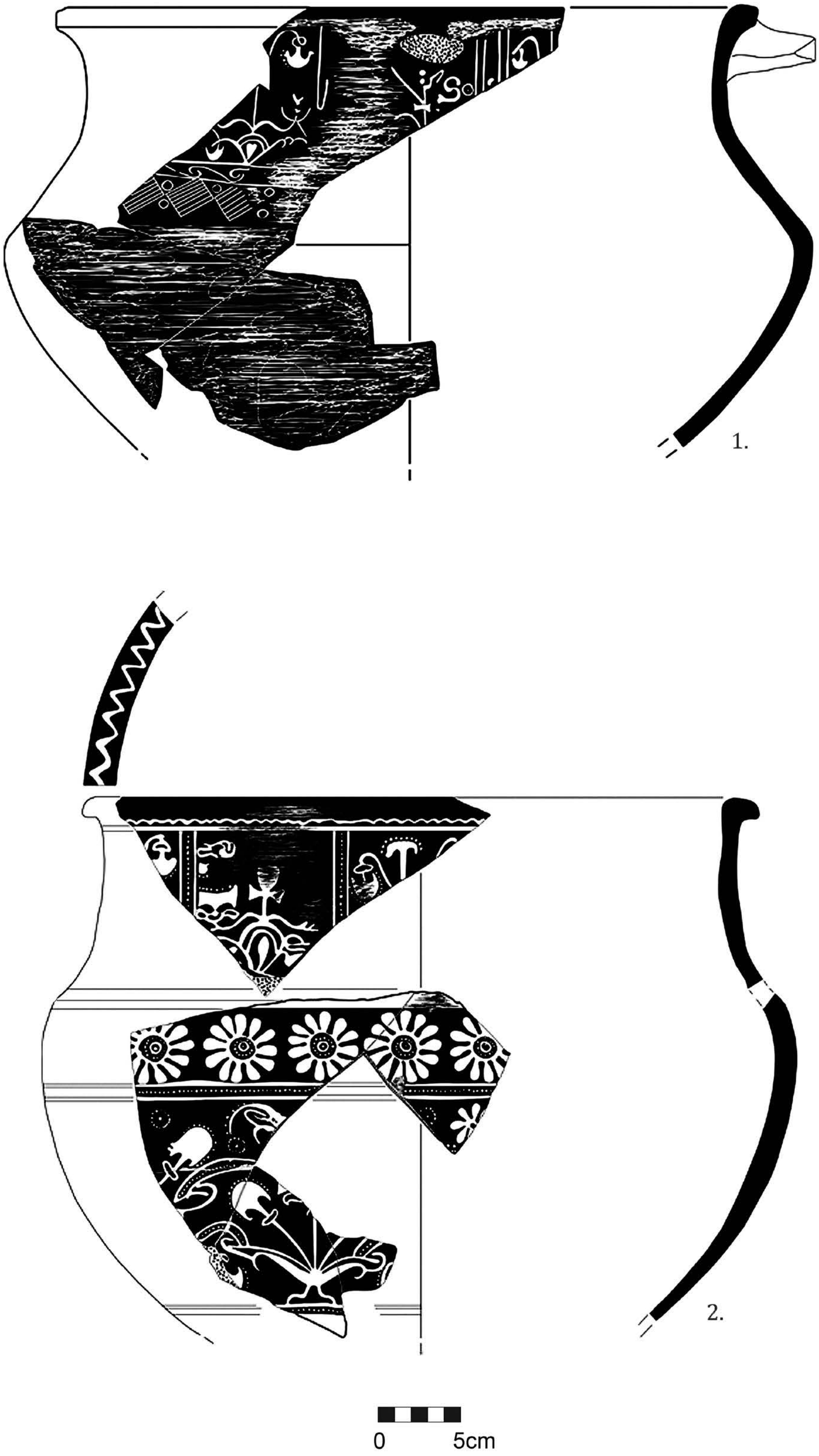

Figure 14: *1) AT 11557, 42.29 Loc 9, Nuzi (Atchana) Ware Krater; 2) AT 1638.200, 64.72 Loc 25, Nuzi (Atchana) Ware Krater (Alalakh Archives).*

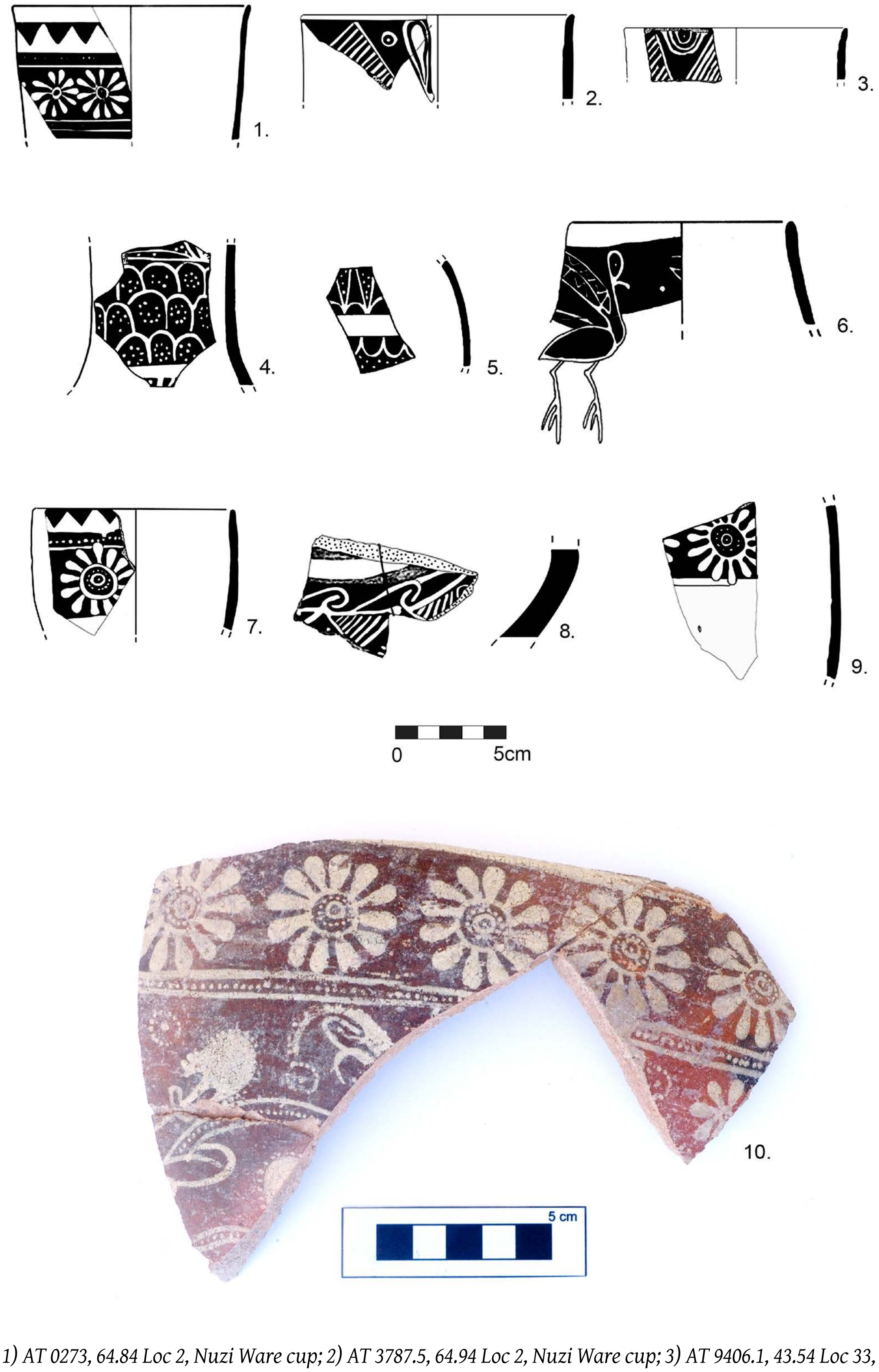

Figure 15: *1) AT 0273, 64.84 Loc 2, Nuzi Ware cup; 2) AT 3787.5, 64.94 Loc 2, Nuzi Ware cup; 3) AT 9406.1, 43.54 Loc 33, Nuzi Ware cup; 4) AT 11062.1, 43.54 Loc 43, Nuzi Ware jar; 5) AT 0321.4, 32.53 Loc 22, Nuzi Ware jar; 6) AT 8252.1, 43.54 Loc 4, Nuzi Ware cup; 7) AT 10962.1, 42.29 Loc 9, Nuzi Ware cup; 8) AT 1061.301, 64.82 Loc 13, Nuzi Ware krater; 9) AT 0912.3, 64.82 Loc 8, Nuzi Ware cup; 10) 1638.200, 64.72 Loc 25, Nuzi (Atchana) Ware Krater (Alalakh Archives).*

Discussion: An international table and the end of the Bronze Age

In the 14th century BC, Mycenaean imports become quite common alongside continuing Cypriot imports. Mostly this is Late Helladic IIIA-2 ware.[78] By the end of the 14th century BC, the Alalakh dining experience had become very international both in actual imports and in locally made Nuzi Ware and Banded Ware. It is interesting to consider the use of all these wares simultaneously in one meal, and the reasons that local residents would choose to do so, although it is currently not possible to prove that any one household served a meal with all of these varieties simultaneously. Distribution patterns currently under study have not revealed any clustering in different domestic contexts or parts of the site which might indicate selective use of certain styles by certain people (either for identity-driven or status-driven reasons). Thus, until the end of Period 1 around the end of the 14th century BC, the ceramic corpus site-wide contains a regular mix of local and foreign styles.

In all exposures except the Ishtar Temple, the Atchana mound reveals late 14th century levels immediately overlain by either modern topsoil or mid-12th century Early Iron Age deposits. There is no sign of 13th century BC occupation, though historical evidence and small finds indicate that the Temple was maintained at least until ca. 1250 BC.[79] Settlement may well have continued throughout the 13th century in an adjacent area off the Atchana mound. Unfortunately, the Bronze Age field level around Atchana is now buried in up to 9 m of sediment.[80] Even a massive Hittite administrative center built on the Bronze Age field level would be undetectable today.

By the end of the Bronze Age, the tumultuous decades between ca. 1200-1170 BC, the locality of Tell Atchana seems to have been deserted. The result is a gap in settlement on the mound that lasted for over 100 years. By examining deposits at Chatal Höyük and the Iron Age levels at Atchana and Tell Tayinat,[81] it is clear that the local ceramic traditions of Simple Ware, Banded Ware, Red Slip Ware, Shellware cookpots, and chaff-tempered pithoi jars continues through to the Iron Age with very little change. The social context for this continuity is unknown. Presumably, Hittite authority was maintained in the Amuq until the fall of the Hittite Empire, at which point there may or may not have been a period of disruption and migration similar to elsewhere in the Mediterranean. It would seem that the local people of the Amuq persevered, based on the strong continuity in the technology, form, and style of the local ceramic repertoire. We should expect that the local population at this point remained multi-ethnic with various connections to neighboring regions, unsurprising in a context where the next phase of political control will style itself 'Hittite' (Neo-Hittite) as well.

Conclusion

Late Bronze Age painted pottery trends at Alalakh show a variety of influences and the precipitous abandonment of local Middle Bronze styles. Due to the wide international contacts of Alalakh, a variety of foreign influences is notable. While the workhorses of the Atchana assemblage, cookpots and water jars and pithoi, change very little throughout the Late Bronze Age from the types introduced in Period 6, and the technical tradition of Simple Ware is continuous, style is very much affected by region-wide trends in both painted decoration and shape of the pots themselves. In the Late Bronze Age Alalakh was multi-ethnic, possessed a diversified economy that combined its agricultural powerhouse with fine craft production such as glass, and was a critical strategic node in regional networks across which significant numbers of people were continuously moving. Any interpretation of evolving painted wares must take place against this background. As work at Alalakh continues to reveal the primarily atextual Periods 6–5 and 3–1, a better framework for interpreting the painted pottery will emerge.

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[78] Koehl 2019.

[79] Yener 2013, 20–21.

[80] Horowitz *et al*. 2020.

[81] For Chatal Höyük see Pucci 2013. For Iron Age Atchana see Montesanto 2018; Koehl 2017. For Tell Taynat see Harrison 2013.

Acknowledgements

The author would like to thank the organizers and participants for their contributions to this session. Only through regional cooperation can we hope to see beneath the overarching structure of empires and find the bedrock of preexisting and persisting cultural traditions. Thanks also to Alalakh Excavations Director K. Aslıhan Yener, Assistant Director Murat Akar, financial officer Gül Bulut, ceramics assistants Müge Bulu, Mariacarmela Montesanto, Christine Johnston. Thanks also to the many students, workers, staff, conservators, and illustrators of 2000–2016, and to the other senior Atchana ceramics team members Ekin Kozal, Robert Koehl, and Marina Pucci. Primary funding for Alalakh Excavations comes from T.C. Kültür ve Turizm Bakanlığı, the Fund for Amuq Valley Archaeological Expeditions, and the Institute for Aegean Prehistory.

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Some Final Remarks

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The innovative idea of pulling together 12 papers that examine Late Bronze Age painted ceramics around the entire periphery of the core Hittite territory has proved to be an interesting and informative exercise. This volume is a welcome complement to a recently published volume on Plain pottery,[1] especially for Anatolia, where the Hittite 'Drab Ware' (or Plain Ware), clearly dominates the Late Bronze Age pottery assemblages of the region (**Introduction Figure 1.8–13**). The papers proceed anti-clockwise from the Black Sea region via the Aegean and the Eastern Mediterranean to the Upper Euphrates with a final paper considering the Amuq. The concept underlying this volume is perhaps unexpected for the simple reason that there is no strong Late Bronze Age tradition of painted pottery in the Hittite homeland, i.e. within the bend in the Kızılırmak. Earlier, Chalcolithic and Early Bronze Age traditions of hand-made pattern-painted pottery culminated with the so-called Cappadocian/Alişar III Ware that lingered well into the Middle Bronze Age (**Introduction Figure 3**).[2] As clearly demonstrated at Kültepe-Kaneš (south of the Kızılırmak) this Cappadocian pottery, both pattern-painted and plain, was increasingly replaced in the Middle Bronze Age by plain slipped and polished red wares in an explosion of shapes that followed with great rapidity the introduction of the fast potter's wheel. At the same time, we can see sharp carinations, pedestals, angular handles and elaborate spouts in the new in the pottery repertoire (**Introduction Figure 4.1–3**).[3] These shapes are very often thought to owe something to the development of new metal shapes that have generally not survived in the archaeological record, but we may note that the characteristic beak spouted jugs frequently depicted in libation scenes perhaps resemble pottery vessels rather than metal ones.[4] This plain red ware tradition continued through the Hittite Old Kingdom until the end of the Empire, although the percentage of polished or burnished wares decreased, as did the area of surface to which slip was applied and the ratio of slipped to plain vessels. As the Hittite Empire expanded in Central Anatolia, the distribution of industrially produced Drab Ware followed, doing so by mechanisms that are hotly debated and for reasons that still require elucidation. We can be sure, however, that aesthetics would have nothing to do with it. Interestingly, with the exception of Cilicia and the Upper Euphrates,[5] Hittite Drab Ware is hardly attested outside of Central Anatolia, and definitely not well-represented in the Hittite-controlled regions of Syria.[6] Of course not all 'Hittite' pottery was red, as best exemplified by the two very large white slipped and burnished animal-headed and crenelated vessels from Ḫattuša.[7] More intriguing is the much-discussed Red Lustrous Wheelmade Ware, including what have been described as sets of spindle bottles containing special oils and libation arms with which to serve them.[8] These seem to have been produced in Cyprus and/or Cilicia, although there were inferior local copies. Was this distinctive red polished pottery produced to meet Hittite tastes or was it, in the first instance, local production that happened to appeal to Central Anatolians? The extent to which it might have copied Anatolian prototypes remains, for the moment,

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[1] Glatz 2015.

[2] Emre 1989, but see also the detailed comments of this topic by Manuelli and Mielke in the 'Introduction' to this volume.

[3] See conveniently the colour illustration in Özgüç 2003; 2010.

[4] Mielke 2006, 46–52; 2017, 126 and Fig. 4a–b.

[5] See Gates 2001 for Cilicia. See Korbel 1985 for the Upper Euphrates and Manuelli 2013, 399–413 for detailed discussion regarding Arslantepe.

[6] An exception seems to be Tell Afis in Syria, see Venturi 1998, 123–163 and Archi and Venturi 2013. For a recent summary see Pucci 2019.

[7] Gruber and Radezky 2017.

[8] Mielke 2007; Steele and Stern 2017; Kibaroğlu *et al.* 2019.

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unclear. There is one class of Old Hittite vessel that does have polychrome patterning, in conjunction with moulded figures, and these are the famous ritual vases from Bitik, İnandıktepe, Hüseyindede Tepesi and elsewhere (**Introduction Figure 7.6**).[9] These, however, are special and exceptional pieces, and the colouring is perhaps clay slip rather than paint. However, as discussed by the editors in the Introduction, closely related and equally rare vases have painted decoration (**Introduction Figure 7.2**) In the utilitarian repertoire, however, painted pottery is extremely rare.

We might ask, then, why it was that the Hittites seem to have shunned pattern-painted pottery.[10] Given the extent and frequency of contacts with Cyprus, as evidenced by the spindle bottles and libation arms just alluded to, the preference for plain fashion cannot be ascribed to lack of familiarity, and although rare a sufficient number of Mycenaean vessels made their way up on the central plateau for their broad concepts of decoration to have been emulated had that been desirable.[11] As the papers in this volume show, the Hittite core was surrounded by various and varied painted pottery traditions. Had the Hittites found any one of them attractive they could surely have emulated it in their own ways, and could also have procured it in quantity. Furthermore, it cannot be that the Central Anatolian clays were more suited to the production of plain wares because pattern painted pottery abounds on the Central Plateau in, as we have seen, earlier periods but also in the Iron Age. Thus, it is seen that the Hittite taste was for plain pottery, and when embellished, plain and shiny – generally red. It is not, perhaps, irrelevant to note that in both Phrygia to the west and Urartu to the east Iron Age preferences were for plain shiny vessels, grey and red respectively. There are, of course, some elaborately pattern-painted pottery vessels together with more mundane painted vessels from Phrygian Gordion that constitute a small percentage of the entire assemblage. It is sometimes thought that these surface finishes imitated metals, grey/black for silver, red for copper/bronze. Perhaps colours and surface finishes of fine wares, like some shapes, drew if only indirectly from the repertoire of metal workers. Surely, though, it was the taste of the consumer that was met by the producer rather than the other way round. Yet, precisely in the core area of the former Hittite Empire the Iron Age pottery is dominated by elaborate painted decorations, the so-called Alişar IV-style, which most likely draws on pre-Hittite decorative traditions in the region.[12] The preference of either painted or drab pottery therefore seems to be a cultural and socio-technological phenomenon rather than one dictated by the environment and availability of suitable raw materials, because we see marked changes in pottery styles within the same region over time.

In the south there is some evidence, as described in the pages above,[13] that locally produced Hittite shapes were decorated with painted patterns. This seems not to have happened elsewhere. Pattern-painted pottery in the Pontic region, made for a market with different tastes, seems not to have held appeal in the Hittite core lands. While only isolated specimens of this Painted Pontic pottery found their way into the Hittite core region in Central Anatolia,[14] in the Early Iron Age this Painted Pontic ware is well represented in Boğazköy and neighbouring sites.[15] This phenomenon most likely has to be interpreted as a migration of Pontic populations (presumably the Kaška mentioned in Hittite sources) into the area, following the vacuum created by the collapse of the Hittite Empire.[16] In other areas Drab Ware occurs alongside local traditions that owe little to those of potters producing for a Hittite market.

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[9] Yıldırım 2008 with references.

[10] For an overview of Hittite pottery see Schoop 2011 and Mielke 2017.

[11] Genz 2004a; Mielke 2004, 155–157.

[12] Genz 2005.

[13] See especially Şenyurt and Akçay, this volume but also Yaşin and Aksoy, this volume as well as Kozal, this volume.

[14] See Mielke, this volume for a detailed discussion.

[15] Genz 2004b, 24–28.

[16] Seeher 2010.

It would seem, therefore, that Hittite culture contained an almost exclusive preference for plain ceramics, and that where pieces were a cut above common wares they were embellished with red slip and burnished, sometimes to a high polish. This style had its immediate origins in the Kārum period wheelmade pottery best exemplified at Kültepe-Kaneš, but can be traced much further back to the red slipped and polished pottery traditions of the Central Anatolian Early Bronze Age.[17] It was not, then, something specifically Hittite but, rather, something Central Anatolian. Regarding practical matters, the Kızılırmak (Red River) clays of central Türkiye are ideal for making red pottery (although in fact many of the modern products of the Avanos region are buff or shades of reddish buff). It is, of course, more difficult to create striking painted patterns on red surfaces than on lighter ones. Additionally, firing temperatures together with processes of applying slip and high burnish may not be easily compatible with pattern-painting. Middle Bronze Age Cappadocian Wares were slipped, painted and then over-burnished, but they were fired at relatively low temperature and the surfaces are very often fugitive. While these technical and material difficulties may perhaps provide part of an explanation, they can only be part of the answer because, as most of the contributions to this volume demonstrate, neighbours in the Aegean and Mediterranean regions were perfectly capable of overcoming them. So too, we may add, were the producers of so-called 'Yayla Ware' or 'Urmia Ware' further to the east.[18] Perhaps the most important single factor were the demands of mass production that appear to typify the Hittite pottery industry. Quantity and speed of production simply did not permit the time that is necessary for the application of painted patterning.

We may now turn to a second theme, that of distributions of painted wares. With regard to the north, it is unfortunate that so little is known about the Black Sea littoral. Moving inland there is the interesting new evidence for a Late Bronze Age pattern-painted pottery tradition within the Kaška Lands. Perhaps the most important general point to be made is in regard to Kaška-Hittite cultural relations. The close, often but not entirely hostile, relationships between the Kaška peoples and the Hittites have always been very hard to pin down through study of their respective cultures.[19]

Glatz and Matthews 2005. It can now be seen that painted pottery is no exception to this exclusivity. This may help to confirm that failure to identify other types evidence relating to cross-cultural influences between the two is not entirely to be put down to chance.

It is most striking that the density of pattern painted Late Bronze Age ceramics in Türkiye is very largely restricted to the coastal strip of the Aegean and Mediterranean Seas.[20] This is not, of course, a new observation, but one strongly reinforced by the present volume. It is really only in the Amuq, and to a certain extent also in Central-Eastern Anatolia, that we detect larger quantities inland.[21] In the Plain of Antioch, however, traversed by the Orontes with concomitant opportunities for transport along the river, it is helpful to think of the settlements being coastal at least with regard to connections and trade. Each center of pottery production, on both mainland and islands had local, more or less distinctive, characteristics of style. Pottery vessels, whether traded in their own right as attractive objects or for their contents, or more probably as a package of both, were widely distributed – finding common appreciation and emulation. One can easily imagine that potters too sometimes relocated, although that is difficult to demonstrate.[22] The wider, more general, point that stems from these brief observations is that the studies in this volume highlight great differences between the Hittite central plateau and the Aegean and Mediterranean coasts where Hittite rule does not appear to have been strong, and its cultural dominance was rather weak. While pottery is but one component of material culture, in archaeology it holds an elevated, and disproportionate, place because of its ubiquity and indestructibility, as well as its lack of value to its owners once broken. Thus the Late Bronze Age ceramics described and discussed in the foregoing pages may be taken as a proxy for the much deeper cultural differences between the Late Bronze Age Hittite Empire on the Anatolian plateau and the more diverse, independent and interconnected polities of the coastal regions and further surrounding areas. Decorative traditions on pottery may therefore have been used by non-Hittite population groups as a means to assert at least a cultural independence from their Hittite overlords.

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[17] Orthmann 1963.

[18] Özfirat 2001.

[19] Glatz and Matthews 2005.

[20] Dedeoğlu and Konakçı, this volume; Mountjoy 1998; Vaessen 2016.

[21] Horowitz, this volume; Manuelli, this volume

[22] Mielke 2006, 173; 2017, 138–139; Vaessen 2015. For the involvement of state institutions in pottery production in the Hittite Empire see Mielke 2016; 2022.

The question why some societies shunned painted pottery while others revelled in it is definitely not easy to answer. A first step, which this book provides, is definitely a detailed documentation of the available evidence. Cultures – both past and present – cannot be fully understood by just defining their broad outlines without taking into account variations and exceptions. Yet it is certainly naive to assume that we will obtain clear answers just by amassing more data. While detailed documentation of various phenomena and their quantification is an important step, this will not automatically lead to a better understanding of the backgrounds of such phenomena.

Taking the case of pottery as an example, painted patterning is undoubtedly far more than just an aesthetic or technological trait. There are a wide variety of social, economic and cultural factors influencing the decisions of producers and consumers. It is axiomatic that archaeological sources are necessarily incomplete, and this is especially true in the case of mundane objects like pottery vessels for which we can never expect to obtain all information necessary to understand the underlying structures. It is virtually certain that we will never find a textual source with a decree by a Hittite king or official providing instructions as to how potters should produce their vessels. Yet, by providing detailed studies – just as the contributions in this volume do – we at least begin to better understand the complex issues behind the production, use and appreciation of even such everyday objects as pottery vessels. As stated before, decorating pottery involves far more than simply technological and aesthetic decisions. Especially in a complex socio-political context such as the Hittite Empire encompassing a multitude of different ethnic entities, material culture may have been used to highlight differing agendas between a central authority and local actors.

While the contributions in this volume cannot provide definitive answers to these extremely complex questions, they undoubtedly highlight the diversity of regional developments and therefore convincingly challenge the traditional view of the existence of a unified material culture within the Hittite-dominated regions of Anatolia.

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